Serbia Resource Cities Program
Best Practices Symposium
Belgrade, Yugoslavia
October 24 – 25, 2002

### **Table of Contents**

1. AGENDA	5
2. KRAGUJEVAC CASE STUDY: ENHANCING ECONOMIC DEVELOPMENT	9
2.1 Introduction & Summary	11
2.2 Problem Statement	11
2.3 Project Description/Implementation	12
2.4 Key Results_	12
2.5 Lessons Learned	13
3. PANCEVO CASE STUDY: BUILDING ECONOMIC DEVELOPMENT CAPACITY	15
3.1 Introduction & Summary	17
3.2 Problem Statement	17
3.3 Project Description/Implementation	17
3.4 Key Results and Recommendations  3.4.1 Strategic Planning  3.4.2 Community Building  3.4.3 Land Use Planning  3.4.4 Downtown Planning and Redevelopment  3.4.5 Pancevo's Strategic Vision for Economic Development  3.4.6 Economic Development  3.4.7 Environmental Issues  3.4.8 Government Management Issues	18 18 19 19 19 20 21
3.5 Lessons Learned	22
3.6 Appendix: Results of the Pancevo SWOT Analysis	23
4. TIMISOARA CASE STUDY: ONLINE PROPERTY TAX SYSTEM AND REAL ESTATE DATABASE	25
4.1 Introduction & Summary	27
4.2 Problem Statement	27
4.3 Project Description/Implementation	29
4.4 Key Results	
4.5 Lessons Learned	31

5. SUBOTICA CASE STUDY: ESTABLISHING A FRAMEWORK FOR ECONOMIC DEVELOPMENT	33
5.1 Introduction & Summary	35
5.2 Problem Statement	35
5.3 Project Description/Implementation	36
5.4 Key Results and Recommendations	37
5.4.1 Establish an Organizational Framework for Economic Development Planning 5.4.2 Developing a Relationship of Trust	
Between Government and the Private Sector (Creating a Business Advisory Committee)	
5.4.4 Economic Opportunities	38
5.4.5 Education and Workforce Development	39
5.4.6 Coordination Between Providers	
5.5 Lessons Learned	39
5.5.1 Building Trust Between the Public and Private Sectors	39
5.5.2 Serbian Law on Privatization	40
5.5.5 Serbian Law on Local Sen-Government	40
5.5.4 Coordination Between Economic Development Providers	40
5.6 Conclusion	40
5.7 Appendix: Recommended Actions and Parties Responsible	41
6. KRAGUJEVAC CASE STUDY: EXPLORING OPTIONS FOR EFFECTIVE SERVICE DELIVERY	43
6.1 Introduction & Summary	45
6.2 Problem Statement	45
6.3 Project Description/Implementation	46
6.4 Key Results	47
6.5 Lessons Learned	47
6.6 Future Activities	47
7. NIS CASE STUDY: REDEVELOPING THE NIS AIRPORT	49
7.1 Introduction & Summary	51
7.2 Problem Statement	51
7.3 Project Description/Implementation	52
7.4 Key Results	54
7.5 Lessons Learned	54

8.1 Introduction & Summary	
7.1 Introduction & Summary	
3.2 Problem Statement	
3.3 Project Description/Implementation	
8.3.1 Procurement of Equipment	
8.3.2 Well Cleaning and Maintenance	
8.3.3 Leak Detection	
8.3.4 Heating System Improvements	
3.4 Key Results and Recommendations	
8.4.1 Laboratory and Pumping Equipment	
8.4.2 Well Maintenance	
8.4.3 Leak Detection	
8.4.4 Heating System	
3.5 Lessons Learned	
9.2 Problem Statement	
9.2 Problem Statement9.3 Project Description/Implementation	
9.2 Problem Statement9.3 Project Description/Implementation	
9.2 Problem Statement 9.3 Project Description/Implementation 9.4 Key Results	
9.2 Problem Statement 9.3 Project Description/Implementation 9.4 Key Results 9.5 Lessons Learned	
9.2 Problem Statement 9.3 Project Description/Implementation 9.4 Key Results 9.5 Lessons Learned 10. NIS CASE STUDY: DEPARTMENT FOR INFORMATION AND CIV	
9.1 Introduction & Summary	IC INITIATIVES _
0.2 Problem Statement  0.3 Project Description/Implementation  0.4 Key Results  0.5 Lessons Learned  10. NIS CASE STUDY: DEPARTMENT FOR INFORMATION AND CIV  10.1 Introduction & Summary  10.2 Problem Statement  10.3 Project Description/Implementation	IC INITIATIVES
0.2 Problem Statement  0.3 Project Description/Implementation  0.4 Key Results  0.5 Lessons Learned  10. NIS CASE STUDY: DEPARTMENT FOR INFORMATION AND CIV  10.1 Introduction & Summary  10.2 Problem Statement  10.3 Project Description/Implementation  10.3.1 Organizational Analysis	IC INITIATIVES
0.2 Problem Statement	IC INITIATIVES
9.2 Problem Statement 9.3 Project Description/Implementation 9.4 Key Results 9.5 Lessons Learned 10. NIS CASE STUDY: DEPARTMENT FOR INFORMATION AND CIV 10.1 Introduction & Summary 10.2 Problem Statement 10.3 Project Description/Implementation 10.3.1 Organizational Analysis	IC INITIATIVES

#### **Agenda**



Serbia Resource Cities Program
Best Practices Symposium
Belgrade, Yugoslavia
October 24 – 25, 2002



**European Movement** 

Serbia



#### Wednesday, October 23<sup>rd</sup>

7:30 – 9 p.m. Welcoming Reception at the 'Dva Jelena' Restaurant in Old Town Belgrade

Thursday, October 24th

8:15 – 9 am Registration, Sava Center

**9 – 9:30 a.m.** Introductory Remarks/Overview of the Day

Invited keynote speaker: U.S. Ambassador William Montgomery Danijel Pantic, Secretary General, European Movement in Serbia

Radmila Hrustanovic, Mayor of Belgrade

USAID (Spike Stevenson, Mission Director or designee) Jon Bormet, Director, ICMA Resource Cities Program

Goran Ciric, Mayor of Nis and President, Standing Conference of Towns

and Municipalities of Yugoslavia

**9:30 – 10:15 a.m.** Case study presentation: Enhancing Economic Development in Kragujevac

Moderator: Jon Bormet, Director, ICMA Resource Cities Program

Presenters: Matt Kridler, City Manager, Springfield, Ohio

Shannon Meadows, Executive Assistant to the City Manager,

Springfield, Ohio

Dobrica Milovanovic, Deputy Mayor, Kragujevac

**10:15 – 10:30 a.m.** Questions and Answers

**10:30 – 11 a.m.** Coffee Break

**11 – 11:45 a.m.** Case study presentation: Strategic Planning and Economic Development

in Pancevo

Moderator: Matt Kridler, City Manager, Springfield, Ohio

Presenters: Pete Gillon Development Manager, Department of Community

Development, Cincinnati, Ohio

K. Scott Enns, Coordinator, Community Development &

Planning, University of Cincinnati

Angelina Perduh, Finance and Economics Director, Pancevo

11:45 a.m. – 12 p.m. Questions and Answers

**12 – 12:30 p.m**. Case study presentation: Establishing an Online Property Tax System and

Real Estate Database in Timisoara, Romania

Moderator: Pete Gillon, Development Manager, Department of Community

Development, Cincinnati, Ohio

Presenter: Adrian Bodo, Adjunct Director, Finance Department, Timisoara, Romania

**12:30 – 12:45 p.m.** Questions and Answers

**12:45 – 2 p.m.** Buffet Lunch and Informal Roundtable Discussions

(Bring your lunch and join your colleagues in a discussion on one of the following topics)

- Creating a Support Network for Small and Medium Enterprises facilitated by Pete Gillon, Development Manager, Department of Community Development, Cincinnati, Ohio
- Effective Public-Private Partnerships for Economic Development facilitated by Aurelia Junie, Director of Strategies and Programs, Timisoara, Romania and Mark Albrecht, Economic Development Manager, Akron, Ohio
- Tips on Applying for Grants and Loans facilitated by Gyula Novak, Managing Director, Szegedi Viziközmű Működtető Rt., Szeged, Hungary, Ferenc Szabo, Managing Director, Szegedi Környezetgazdálkodási Kft., & Shannon Meadows, Economic Development Assistant, Springfield, Ohio
- Elected Officials and City Managers: a Collaborative Partnership –
  facilitated by Matt Kridler, City Manager, Springfield, Ohio and Valerie
  Lemmie, City Manager, Cincinnati, Ohio

**2 – 2:45 p.m.** Case study presentation: Establishing a Framework for Economic

Development in Subotica

Moderator: Pete Gillon, Development Manager, Department of Community

Development Cincinnati, Ohio

Presenters: Mark Albrecht, Economic Development Manager, Akron, Ohio

Nada Bojanic, Special Assistant for Economic Development,

Subotica

2:45 – 3 p.m. Questions and Answers

**3 – 3:45 p.m.** Case study presentation: Exploring Options for Effective and Efficient

Service Delivery in Kragujevac

Moderator: Valerie Lemmie, City Manager, Cincinnati, Ohio

Presenters: Al Wansing, Senior Project Managers, Department of Public

Services, Springfield, Ohio

Matt Kridler, City Manager, Springfield, Ohio

Dragan Milosavljevic, Director of Public Utilities, Kragujevac

3:45 – 4 p.m. Coffee Break

**4 – 4:15** Questions and Answers

**4:15 – 5:15 p.m.** Panel Discussion: 'Creating an Environment to Support Best Practices:

Disseminating and Replicating Lessons Learned'

Moderator: Corinne Rothblum, Senior Program Manager, ICMA

Speakers: Mayor Goran Ciric, City of Nis

Mayor Borislava Kruska, City of Pancevo

Geza Kucera, President of the Executive Board, City of

Subotica

Mayor Vlatko Rajkovic, City of Kragujevac

7:30 – 10 p.m. Welcome Dinner at the Intercontinental Hotel

#### Friday, October 25<sup>th</sup>

9 - 9:15 a.m. Summary of the previous day

Jon Bormet, Director, ICMA Resource Cities Program

9:15 - 10 a.m. Case study presentation: Redeveloping Nis Airport

Moderator: K. Scott Enns, Coordinator, Community Development &

Planning, University of Cincinnati

Presenters: Mr. Radisav Radojkovic, Director, Nis Airport

James Mako, Director, Rickenbacker International Airport,

Columbus, Ohio

10 - 10:15 a.m. **Questions and Answers** 

10:15 - 10:45 a.m. Coffee break

10:45 - 11:30 a.m. Case study presentation: Strategies to Improve Drinking Water Supply.

Distribution, and Central Heating Management in Pancevo

Moderator: Al Wansing, Senior Projects Manager, Department of Public

Services, Springfield, Ohio

Presenters: Carel Vandermeyden, Senior Engineer, Waterworks

Department, Cincinnati, Ohio

Russ Weber, Engineer, Waterworks Department, Cincinnati,

Ohio

Milica Obuskovic, Technical Director, Pancevo Waterworks

Company

Zoran Bozanic, Technical Director, Pancevo Heating Company

11:30 - 11:45 a.m. Questions and Answers

11:45 - 12:30 p.m. Case study presentation: Developing a Waste Water Treatment Plan for

the Restoration of Lake Palic, Subotica

Moderator: Carel Vandermeyden, Senior Engineer, Waterworks

Department, Cincinnati, Ohio

Presenters: Mike McGlinchy, Public Utilities Manager, Akron, Ohio

Rudolf Cinkler, Managing Director, Subotica Water Company

Gyula Novak, Managing Director, Szegedi Viziközmű

Működtető Rt., Szeged, Hungary

12:30 - 12:45 p.m. Questions and Answers

12:45 - 2 p.m. Buffet lunch and informal round table discussions

(Bring your lunch and join your colleagues in a discussion on one of the following topics)

Attracting Private Investment – facilitated by Gheorghe Ciuhandu, Mayor, Timisoara, Romania & Pete Gillon, Development Manager, Department of Community Development, Cincinnati, Ohio

• Effective Citizen Participation Strategies – facilitated by Aurelie Junie, Director of Strategies and Programs, Timisoara, Romania and Valerie

Lemmie, City Manager, Cincinnati, Ohio

• Metering Water Services – facilitated by Al Wansing, Senior Project Manager, Department of Public Services, Springfield, Ohio & Russ Weber, Engineer, Waterworks Department, Cincinnati, Ohio

 Strategies to Improve Well Water Management – facilitated by Carel Vandermeyden, Senior Engineer, Department of Waterworks, Cincinnati, Ohio

**2 – 2:45 p.m.** Case study presentation: Creating an Office for Public Information and

Civic Initiatives in Nis

Moderator: Moderator: Shannon Meadows, Executive Assistant to the City

Manager, Springfield, Ohio

Presenters: Nebojsa Rancic, Executive Board Member, Nis

Vicki Rulli, Economic Development and Planning Services,

Columbus, Ohio

2:45 – 3 p.m. Questions and Answers

**3 - 4 p.m.** Panel Discussion: Promoting Cross-Border Cooperation

Moderator: Jon Bormet, Director, ICMA Resource Cities Program Speakers: Mayor Stefan Sofianski, Mayor, City of Sofia, Bulgaria

Mayor Tudor Pendiuc, Mayor, City of Pitesti, Romania Mayor Gheorghe Ciuhandu, City of Timisoara, Romania

Robert Mezey, Notary, City of Szeged, Hungary

**4 – 4:30 p.m**. Press Conference







## KRAGUJEVAC CASE STUDY: Enhancing Economic Development

Serbia Resource Cities Program
BEST PRACTICES SYMPOSIUM
Belgrade, Yugoslavia, October 24–25, 2002



Serbia Resource Cities Program
Best Practices Symposium
Belgrade, Yugoslavia
October 24 – 25, 2002





## KRAGUJEVAC CASE STUDY: Enhancing Economic Development

#### **Introduction & Summary**

The cities of Kragujevac, Serbia; Pitesti, Romania; and Springfield, Ohio, established a three-city partnership in July 2000 through the Serbia Resource Cities Program (SRCP) to provide technical assistance and support to democratically minded municipal leaders within the Republic of Serbia. The SRCP was created to improve service delivery and increase the understanding and support for democratic local government in Serbia. The program targets the following strategic areas that reflect USAID's priorities: encouraging broad-based economic growth, strengthening democracy and good governance, and building human capacity through education and training.

The partnership focused mainly on the city of Kragujevac, but as the exchanges progressed, it became apparent that Kragujevac and Pitesti shared many parallels. The partnership exchanges then incorporated suggestions and technical discussions to benefit Pitesti as well. The cities developed strategies to strengthen local democratic government, with the intention that Kragujevac and Pitesti would emerge as role models of successful local democracy in Eastern Europe.

The partnership action plan discussed the need to evaluate current markets, resources, and economic development opportunities; and develop strategies that enhance economic development programs. One exchange focused on evaluating the market economies in Pitesti and Kragujevac. From this visit came many discussions, strategies, and suggestions for long-term economic development creation in each city.

Springfield had valuable experience in enhancing economic development to share with its partners. In the mid-1980s Springfield's economy plummeted to such an extent that local street lights were turned off in an effort to save city funds. In addition, the largest auto plant shut its doors for an extended time. The workforce, trained in the field of auto manufacturing, was not able to find additional means of work. As a result, Springfield experienced explosive rates of unemployment that reduced the local tax base and with it the city's ability to provide basic public services. Springfield's political leaders and administrative team refocused their efforts to establish goals and objectives that would enable Springfield to rebound and become a leader in the region.

Today, although facing challenging economic times, Springfield is still considered a leader in local government. The tax base has been diversified to help absorb industry downturns, and redevelopment is occurring in the urban core. Such changes required time and long-term commitment to making change. Community leaders within Springfield had to change focus so that the citizens could enjoy a high standard of living and efficient service delivery. Springfield's city representatives have shared these experiences and difficulties with Kragujevac and Pitesti leaders.

#### **Problem Statement**

The greatest issue facing Pitesti and Kragujevac leaders is the economy. From a macroeconomic standpoint, the most pressing issues concern the need for legal reform and the establishment of

property rights. Legal reform and property rights are key components needed to attract foreign direct investment. On the local level, one challenge is the decline and subsequent restructuring of Kragujevac's main industrial company, Zastava. The uncertainty that surrounds businesses is a concern. Also, the uncertain relationship that exists between local government and the national government continues to hinder city efforts to address local problems. It is clear that in both countries local governments will be given greater responsibility in the near future for providing public goods and services. At the same time, it is clear that local governments will need to be able to raise money from local sources to supplement the grants that may come from the central governments. With these issues in mind, the economic development teams from the three partner cities have worked to formulate long-term strategies for development and growth.

#### **Project Description/Implementation**

The economic development opportunities for Kragujevac and Pitesti could not be improved significantly during the two-year partnership; however, the groundwork for cooperation and support of the cities' economic development efforts has been laid. Springfield has shared with both partner cities its strategies for capturing growth and revitalizing the urban core. Springfield continues to work with the two European cities to address the challenges private businesses face, especially in the area of property acquisition for expansion, financing, and the legal framework for doing business. Much work in this area requires reforms at the state level; however, learning growth strategies today will be beneficial in the future.

Economic development success or failure depends greatly on the transition of Zastava from a state-run company to a privately owned and operated business. Springfield representatives have worked to understand Zastava's reorganization plan—up to 15,000 jobs will be eliminated, and many cutbacks have already occurred. Kragujevac has developed a loan program that targets 4,000 Zastava workers who have the potential to start their own private business. When this program is implemented, Springfield will work with the local government to build a small business development center. Such a center, very common in the United States, will be able to provide business plan assistance, capital assistance, and possibly some low-interest revolving loans.

Springfield, Kragujevac, and Pitesti have identified the strengths, weaknesses, opportunities, and threats (SWOT) that face each city in terms of economic development. The principles outlined through the SWOT analyses have helped the economic development teams plan for long-term economic opportunities. In Kragujevac, city officials, along with Kragujevac University faculty and students, took part in the analysis. The diversity of the group allowed the SWOT analysis to incorporate viewpoints from stakeholders, current leaders, and future leaders.

To ensure ongoing dedication to economic development opportunities and plans, Wittenberg University (Springfield), the University of Kragujevac, and Pitesti University explored a three-way partnership for interdisciplinary studies related to local government and economic development. The idea of interdisciplinary teams was somewhat foreign to the faculty at the Universities of Kragujevac and Pitesti; however, after examining the Wittenberg Urban Studies Team's example, the three universities determined that the concept was good not only for the academic programs but for each city as well. Springfield often depends on the recommendations of the Wittenberg Urban Studies Team when considering policy decisions, long-range plans, economic development strategies, and growth patterns. Implementing the same concept in Kragujevac and Pitesti will not only be helpful for local government officials but will also create an additional pool of professionals dedicated to democratic local government decision making.

#### **Key Results**

Economic strategic plans are in place; however, foreign direct investment (FDI) is badly needed in both partner countries, especially Serbia. The economic development team recognizes that FDI cannot happen until legal reforms are in place and issues of property rights resolved. Many existing firms are in desperate need of capital. As the markets in Romania and Serbia continue to

transition to stronger economies, FDI will increase, and further economic development opportunities will become available. An economic development office will be critical at this point.

In the meantime, however, the cities have established a sustainable partnership in an effort to deal with the long-term needs and issues that will continue to confront the communities. Spring-field, Pitesti, and Kragujevac have officially entered into Sister Cities International agreements. These agreements are key results and demonstrate the success of the partnership over the past two years.

Another key result is the formal agreement that the three cities' universities have signed. With this agreement, Wittenberg has agreed to host professors from the two European universities and to provide housing and study space. The intent is to include these professors in the Wittenberg Urban Studies interdisciplinary program, thus benefiting all parties involved. In the future, Wittenberg will seek to establish a scholarship fund for students from Kragujevac and Pitesti.

The new interdisciplinary programs in Kragujevac and Pitesti will allow the universities to work with local businesses to design a continuing education curriculum that will prepare students for available jobs for the future. The programs will also benefit the local governments, as Wittenberg's team has benefited Springfield, in helping to analyze policy considerations and plans for the future.

Exchanges in Springfield and Eastern Europe will continue. As the state governments continue to change and give added responsibilities to the cities, Springfield will continue to offer technical assistance. The sustained cooperation among the three communities demonstrates that the local government officials and citizens of the partner communities are committed to maintaining efficient, effective, democratic local government and developing economic opportunities. This commitment is what is needed to position Kragujevac and Pitesti for success and allow the two cities to emerge as leaders of local democratic government in Eastern Europe.

#### **Lessons Learned**

Improving the economic conditions of any city is a task that takes long-term commitment, dedication, and strategic planning. Increasing the understanding and building the support for a new form of government can be very challenging, especially in difficult economic times. Springfield, Pitesti, and Kragujevac quickly learned that a time frame beyond two years would be required to see true economic development success in any of the three cities. Though the cities planned to develop projects and establish programs that would lead to quick results, it became very clear that complicating factors, such as centralized state government control and newly emerging market economies, would pose great challenges. However, the three cities are overcoming these challenges through their commitment to a sustainable partnership. Through their partnership, Kragujevac, Pitesti, and Springfield are more likely to have long-term success in implementing sustainable problem solving and programs to support effective local government leadership and economic development strategies







# PANCEVO CASE STUDY: Building Economic Development Capacity

Serbia Resource Cities Program
BEST PRACTICES SYMPOSIUM
Belgrade, Yugoslavia, October 24–25, 2002



European Movement

Serbia Resource Cities Program
Best Practices Symposium
Belgrade, Yugoslavia
nt October 24 – 25, 2002





## PANCEVO CASE STUDY: Building Economic Development Capacity

#### **Introduction & Summary**

In July 2000, the cities of Pancevo, Serbia; Timisoara, Romania; and Cincinnati, Ohio, agreed to serve as Resource Cities to help each other address their respective management and service delivery issues. This three-way partnership was intended first and foremost to assist the municipal government of Pancevo to address some of its critical service delivery needs.

During the first exchange visit to Cincinnati in early 2001, the Pancevo delegates learned about the economic development strategies and programs that Cincinnati uses to support existing private businesses and attract new investments. At Pancevo's request, the partners revised their partnership work plan to include a focus on economic development, strategic planning, and general government management issues.

#### **Problem Statement**

The environmental and economic damage to Pancevo caused by 50 years of communism, pollution, and war left the city with high unemployment, alarming rates of disease, and an obsolescent industrial base. Pancevo identified environmental remediation, infrastructure, transportation, privatization of public companies, and development of the Port of Pancevo as key focus areas for economic revitalization. Also, addressing the needs of Pancevo's 2,500 small and medium-sized businesses is critical to creating jobs and ensuring economic stability. Decentralization of authority to local government also provides Pancevo with challenges as well as flexibility and greater control over local decisions for economic development.

Like all cities in Serbia—indeed, throughout the region—Pancevo has limited resources. In order to improve conditions by upgrading its infrastructure and information support systems, the city administration has received grants from a number of different sources. Municipal officials recognize that they need to improve government management systems and to build the city's administrative and organizational capacity as a prelude to undertaking economic development activities. Much of the partnership's work has focused on building that capacity, while at the same time assisting with immediate economic development issues.

#### **Project Description/Implementation**

Over the last two years, delegations from Pancevo have visited Cincinnati twice, and Cincinnati has sent four teams to Pancevo. Team members from Cincinnati have included water engineers, an economic development manager, a planner/architect from the University of Cincinnati, and the director of the Cincinnati Equity Fund. The teams have provided expertise in water systems management, planning, community building, architectural design, and alternative sources of economic development funding.

In July 2001, the Cincinnati team conducted a Strengths, Weakness, Opportunities and Threats (SWOT) analysis with Pancevo staff (see Appendix 1 for results of the SWOT analysis). Most of the partnership activities and recommendations were driven by that initial analysis. As part of the SWOT process, the Cincinnati team met with small businesses, banks, farms, public companies, the Chamber of Commerce, and the Pancevo Planning Department. The meetings also helped inform Cincinnati's technical support and recommendations for future actions.

During the exchange visits, the Cincinnati team led a series of training sessions for Pancevo staff on the following topics:

- An Introduction to Economic Development
- Business Retention and Attraction
- Business Assistance
- Strategic Planning.

Visits to Cincinnati provided a maximum exposure to relevant topics in a short period of time. The Pancevo delegations met with planning organizations, water works, the wastewater treatment plant, transportation agencies, utilities, companies interested in international trade and investment, environmental agencies, the Chamber of Commerce, downtown marketing organization, University of Cincinnati business and engineering schools, equity funds, venture capital fund firms, and various city and county departments. A special highlight of the second exchange to Cincinnati was a luncheon at which the delegations from Pancevo and Timisoara met with 100 business, community, and government representatives from Cincinnati. This was an important opportunity for both cities to establish contacts with a number of companies that are interested in trade with and investment in the Lower Balkan Region and Romania. As a result, the Cincinnati Chamber of Commerce and businesses are planning a trade delegation to Pancevo for the spring of 2003.

#### **Key Results and Recommendations**

Cincinnati experts have provided technical advice, training, information and sample documents, and a variety of networking opportunities to their colleagues in Pancevo. Key results and recommendations for each major area addressed are summarized below.

#### Strategic Planning

Cincinnati staff led a series of training sessions for city staff regarding the strategic planning process for economic development. These sessions addressed conducting an economic assessment; goals, objectives, and strategies; prioritizing projects; formulating action plans; and monitoring.

In conjunction with the training, Pancevo has begun to articulate a "Strategic Vision"—a pragmatic response to immediate, apparent planning and development opportunities. This vision has been productive so far and has enabled the city to address major issues demanding immediate attention, but scarce resources ultimately require careful application to priority objectives. As soon as possible, Pancevo should undertake a formal strategic planning process involving all stakeholders (community, private sector, and government), resulting in a thorough development plan for the city's future. Cincinnati recommends that Pancevo retain a professional facilitator to guide this process.

#### Community Building

Pancevo encourages the formation of community partnerships and collaboration through local community councils, professional organizations, and citizen interest groups to discuss issues of common concern in their immediate communities. The Cincinnati team met with a citizens' group near the Port of Pancevo industrial area that is concerned about the environmental impacts of

living so close to the chemical and fertilizer plants. This group has applied for grants and is active in the Municipal Assembly. Learning what other groups can contribute and mobilizing resources is a key task in community building and is important for stimulating and sustaining economic development activity in Pancevo.

In addition to government and private sector interests, community stakeholders should also be involved in the formal strategic planning process. Individuals, professional associations, churches, neighborhood groups, and educational institutions are key to identifying the opportunities and trends for development opportunities in the planning process.

#### Land Use Planning

Pancevo is using Autocad software to automate its land use planning. An updated land use map will provide the baseline information necessary for policy development and support more refined regulatory controls in the future development of the zoning and building code. (See Building Code and Zoning Enforcement, under Government Management Issues, below.) The city has retained a professor from the University in Belgrade to produce the land use map and draft a new zoning code. Cincinnati has provided a draft copy of its own new zoning code to Pancevo as a possible model. Pancevo has already taken a first step in updating the land use plan by budgeting \$500,000 for aerial photos, which are near completion.

Cincinnati staff reinforced Pancevo's land use planning efforts during a meeting with the Deputy Planning Minister for Yugoslavia, when the staff emphasized the regional importance of updating the land use plan for greater Pancevo. The land use plan is especially important as it relates to foreign investment and potential development associated with the port, which the national government should consider a regional economic engine.

Cincinnati has recommended that Pancevo should finish updating its land use plan to initiate the strategic planning process and to capitalize on emerging economic development opportunities targeting the Port of Pancevo and other industrial areas.

#### Downtown Planning and Redevelopment

Pancevo's Urbanism Department is preparing a comprehensive redevelopment plan for the downtown area, particularly the square and park near the municipal building. Cincinnati staff suggested expanding the boundary to include renovation of the "Old Town" area (which is already underway) between the city center and the river. Cincinnati staff have also offered to develop some schematic design concepts for consideration by the Urbanism Department related to the proposed renovation of a hotel across from the municipal building, the park, and the storefronts surrounding the park. The partners will share these design concepts at the Belgrade Best Practices Symposium.

#### Pancevo's Strategic Vision for Economic Development

As stated above, while Pancevo is preparing to conduct a thorough and formal strategic planning process, it has already articulated a strategy to pursue development opportunities that are immediately apparent. This strategy must address a range of issues identified in the SWOT analysis including development of the Port of Pancevo, redevelopment of downtown, redevelopment of the "Old Town" and connection with the riverfront, privatization of city-owned companies, construction of infrastructure to support development and residential neighborhoods, upgrades of the transportation system, environmental remediation to support redevelopment, air monitoring to improve air quality, and provision of adequate clean water and cost-effective central heating. The Cincinnati team provided training, resource materials, and contacts to assist in each of these critical issues. The Cincinnati team also worked closely with Pancevo staff to identify these issues and helped formulate them into a coherent step-by-step approach to development.

#### Economic Development

Cincinnati identified the Port of Pancevo as a key underpinning of Pancevo's future economic development, where it is estimated that 28,000 jobs could be created through build-out of the port and surrounding acreage. Pancevo has received preliminary grant approval for a feasibility study of the economic development potential of the port. The developer of the Port of Cincinnati (which sponsored the luncheon held in Cincinnati referenced earlier) has indicated its interest in visiting Pancevo to explore potential trade and investment linkages. In addition, the Cincinnati team sent a letter about the Port of Pancevo to a large U.S. developer that is looking to expand operations in Central and Eastern Europe. Pancevo should now contact commercial international real estate firms in Belgrade and offer to show the port facilities and adjacent land available for development.

Infrastructure: Because of limited resources, Pancevo must balance the need for residential infrastructure and infrastructure necessary to support economic development. One major project completed last year is a highway overpass intended to relieve a major congestion point for commercial trucks serving the industrial area. Pancevo paid for this project out of current revenues but must consider other funding sources for further infrastructure improvements. While financial conditions are not mature enough to support bond sales for further infrastructure improvements, Pancevo explored other techniques in Cincinnati with the city's bond counsel.

Equity Funds: The Pancevo and Timisoara delegations were able to discuss equity funds and their role in development with the Cincinnati Equity Fund during a partnership exchange visit. The purpose of the Cincinnati Equity Fund is to make real estate investments in a limited geographic area of the city—the central business district. Equity funds can have many different missions, such as high-tech development, manufacturing, retailing, industrial parks, convention centers, and downtown or neighborhood housing. The key to starting an equity fund is to determine the exact purpose of the fund. One natural partner would be Delta Bank, a privately run bank that has worked with the city on other initiatives, such as the linked deposit program. While the use of equity funds in Pancevo would be premature at this point, Cincinnati provided Pancevo with a list of international funds and development agencies that might provide seed capital when a fund is started.

Economic Development Staff: Pancevo is dedicating more staff resources to pursuing economic development activities in an ongoing, consistent manner. The city has not yet decided whether that function will continue within the Finance Department or whether the city will create a separate economic development entity. Formal training for economic development staff is available through local universities and through organizations such as ICMA and the International Economic Development Council (www.iedconline.org). International donor programs may also be able to provide support for more intensive economic development training of municipal staff.

Business Retention: The Chamber of Commerce of Greater Pancevo has begun to create a database of existing businesses. Since it is estimated that 65 to 80 percent of all new jobs come from existing businesses, retention is a vital activity in any local development effort. Cincinnati staff suggested that the chamber launch an "Ambassador" program, in which business persons would visit and survey their colleagues in other industries. This is a good way to discover trends and expansion activities, so that the needs of small and medium-sized businesses are addressed.

Pancevo should coordinate its business retention efforts with the Chamber of Commerce. The city should implement its own retention program to complement the Chamber's efforts, with a particular focus on small to medium-sized companies that could realize significant expansion with some technical support.

Business Assistance: Cincinnati gave copies of its Policies and Procedures Manual for Economic Development to Pancevo and provided a disk with sample incentive agreements. During exchange visits the partners also discussed non-financial tools such as one-stop shops, technical assistance, business assistance centers, information dissemination, incubators, business parks, and export assistance. Financial tools discussed included loan guarantees, micro-loans, and

revolving loan funds. The discussions also covered tax credits, tax exemptions and abatements, and tax increment financing of public improvements to support development projects. Pancevo has experimented with a linked deposit program and has also implemented a program to assist companies in acquiring licenses and permits. In addition, Pancevo is promoting the business park concept at the port and adjacent property.

Cincinnati staff have recommended that Pancevo officials develop an economic development policy, identify which assistance tools are feasible in their environment, and implement a business assistance program.

#### Environmental Issues

Air quality is a major concern in Pancevo, but the city lacks monitoring equipment to independently monitor air quality. The U.S. Environmental Protection Agency has a program through which it distributes surplus air-monitoring equipment that is considered obsolete from a U.S. regulatory perspective, but that is still in good working order. Cincinnati staff have registered Pancevo to receive equipment through this program, as well as through a program run by the Association for State & Local Air Pollution Control Officers.

The most common "obsolete" monitors measure the concentration of total suspended particles (TSP) in the air. These are the most commonly available monitors because TSP is no longer regulated in the United States, which now regulates small particles. A TSP monitor would help Pancevo, which has fewer air pollution controls and uses more incinerators than Cincinnati and other U.S. cities. Other potential equipment would be older continuous monitors for ozone, carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), and nitrogen oxides. The carbon monoxide and sulfur dioxide monitors would probably be the most readily available and useful for Pancevo, as its oil refinery emits a considerable amount of CO and  $SO_2$ . All of these monitors require a secure, dry location with electricity and a computer.

In addition to the above, Cincinnati has identified surplus monitoring equipment of its own that it will donate to Pancevo in the near future. Cincinnati's Office of Environmental Management (OEM) has many pieces of air monitoring equipment used in the Citizen Ambient Air Sampling Program. Of primary interest to Pancevo would be summa canisters, which collect a sample of air for analysis via gas chromatography of about 100 air toxics, including some sulfur compounds. Pancevo may have the expertise and equipment to analyze samples, but if not, the city could contract with the University in Belgrade for the analysis. Cincinnati also has a number of handheld monitoring devices that could be very useful to Pancevo, as they are easy to operate and can be used whenever there is a specific problem or incident. Cincinnati has provided Pancevo with copies of Hamilton County's annual Air Quality Report, which discusses in detail the many kinds of pollutants monitored by the equipment described above.

Cincinnati will continue to monitor the status of Pancevo's applications for this equipment, and will provide an update at the Belgrade Best Practices Symposium. Hamilton County staff have demonstrated the use of the air-monitoring equipment described above to Pancevo staff, and are willing to conduct formal training when the equipment is obtained.

#### Government Management Issues

Funding: During the exchange visits, the partners explored potential alternative sources of revenue. Pancevo has begun to assess an environmental fee on trucks serving the industrial zone near the port. This user fee has in part contributed to a significant increase in the municipal budget for infrastructure improvements and economic development initiatives. Pancevo's budget was US\$2,995,000 in 2000 and US\$16,2000,000 in 2002—a 600 percent increase in two years.

Automated Systems: The lack of a local area network (LAN) was an impediment to creating an effective management information system for Pancevo. The city has since received a grant from a French telecommunications company valued at US\$5 million for computers and servers to

implement a citywide LAN. The system, which has just been completed, accesses the Internet through a satellite uplink with four servers and links stand-alone systems in other locations. The ability to describe existing conditions is a key step in planning and economic development, and the new LAN will facilitate data collection and sharing—important mechanisms to support Pancevo's future development.

Performance Measurement: While in Cincinnati, Pancevo staff received training on performance measurement and received a copy of Cincinnati's budget on disk, which includes performance measures for all city operations. Key measures of an economic development function are jobs retained, jobs created, private investment leveraged, and enhancement of the tax base. As a result of this exposure and training, the city has embraced the importance of accountability for the use of public funds to deliver city services, and Pancevo has introduced performance measures as a mandatory part of the budget process. The automated systems mentioned above will facilitate the use of quantitative outcome measurement. Cincinnati will continue to assist Pancevo in establishing a performance-based budget by reviewing suggested performance measures via email.

Pancevo should fully incorporate performance measures into its budget process. The city should publish the results of its operations (outcomes) at least yearly: in an annual report, local newspapers, Web pages, or other accessible format.

Building Code and Zoning Enforcement: Pancevo's building codes, zoning, and land use plans need a thorough overhaul. The city is struggling to enforce existing building code and land use laws, and wild building and unplanned development, both residential and commercial, is occurring on public property at the edge of town. At Cincinnati staff's suggestion, Pancevo has begun periodically rotating code enforcement assignments. This has improved enforcement uniformity and reduced opportunities for corruption.

#### **Lessons Learned**

- Pancevo should consider build-operate-transfer (BOT) arrangements for developing the
  property adjacent to the port. With a BOT arrangement, a private company would finance,
  build, and operate a system for a fixed period, and then transfer it to government ownership.
  Land write-down in exchange for private investment in infrastructure is a viable alternative to
  consider. Pancevo should also seek grants and environmental funds.
- The Pancevo Chamber of Commerce has been aggressive in its business attraction efforts, with marketing trips to Croatia, Germany, Belgium, and Austria. The municipal government should work closely with the chamber to coordinate business attraction.
- As a follow-up to the extensive business contacts established between private companies in Cincinnati and Pancevo, the cities should organize a trade delegation to introduce interested Cincinnati businesses in the trade and investment opportunities in Pancevo and the Banat region. The Port Group of Indianapolis (port developer), Pyromaster (fireworks manufacturer), and Clinical Computing (medical industry software manufacturer) have already expressed interest in making a trip to Pancevo. Cincinnati staff will contact the Cincinnati Chamber of Commerce to gauge further interest.
- Pancevo's 2,500 small businesses hold the key to future economic growth in the region.
   Pancevo should establish business retention and business assistance programs to foster the growth of entrepreneurship. Pancevo should also consider creating a business incubator to assist startups. Cincinnati and Hamilton County both operate business incubators and could provide support in writing a grant proposal to start up an incubator as well as technical advice.
- Once Pancevo has completed its strategic plan, the city should develop a single-sheet
  marketing piece that describes existing conditions and the city's land use plan and summarizes the main objectives of the strategic plan. This marketing piece would offer potential
  investors and developers useful information in an inexpensive format, and could be easily
  mailed or distributed at fairs and conferences.

#### **Appendix: Results of the Pancevo SWOT Analysis**

#### Strengths:

- Developable land, especially 500 acres at and near the Port of Pancevo, as well as two other small ports
- Competitive wage rates
- Motivated, dedicated, educated workforce
- Agricultural industry and food processing plants
- Petrochemical plant
- Yugoslavia's only oil refinery
- Flat glass plant
- Weifert Brewery
- Truck body plant
- 2,500 small businesses
- Proximity to Belgrade's 11 colleges and universities, including four separate engineering schools
- Good local schools
- Good park system and recreation areas
- Two rivers of historical importance—the Danube and the Tamis
- Lively nightlife with many discos and dance clubs
- Varied cultural scene with classical and contemporary arts museums and performing arts venues
- Special events on the riverfront such as festivals and concerts.

#### Weaknesses:

- Declining population,
- High unemployment rate (17,000 unemployed)
- Inadequate and decaying physical infrastructure—roads, bridges, water lines, sewers, and wastewater treatment facilities
- Complex regulatory environment
- · Economy does not provide sufficient tax revenues
- Lack of control at the local level
- Pollution
- Inefficient public companies
- High housing costs relative to the average monthly income of \$150/month
- Lack of automated systems in city departments.

#### **Opportunities:**

- Development of the Port of Pancevo could create 28,000 new jobs through associated light manufacturing and assembly operations
- Foreign trade and investment can be drawn to the port development
- Attraction of foreign and domestic private investment
- Natural gas pipeline for domestic use from Russia will be complete this year, and a larger pipeline from Tajikistan will be redistributed from Pancevo
- Spin-offs from the oil refinery and the chemical industry, if it is environmentally friendly
- Potential for further mechanization of the agriculture industry
- Expansion of food processing plants related to port development
- Privatization law that reduces worker entitlements can lead to greater efficiencies and competitiveness
- Targeting potential buyers of the newly privatized larger companies to encourage investment in new equipment and competitive processes
- New Law on Local Self-Government will give greater authority and control at the local level (including local control of police and fire)
- Computerization can improve productivity and communications throughout the municipal government

- Assistance to small to medium-sized businesses to retain and create jobs
- Tourism development.

#### Threats:

- Pollution in the rivers, the soil, and air from petrochemical and fertilizer plants and oil refinery
- Political and financial instability at the national level and inertia on key legal reforms
- Lack of effective decentralization
- Monetary inflation
- Lack of financial resources at the local level
- Antiquated and obsolescent equipment and inefficient management of public companies
- Emigration of technical and professionally trained workers
- Inadequate health care
- Downward pressure on wages and nascent small and medium-sized private companies due to globalization.







# TIMISOARA CASE STUDY: Online Property Tax System and Real Estate Database

Serbia Resource Cities Program
BEST PRACTICES SYMPOSIUM
Belgrade, Yugoslavia, October 24–25, 2002



European Movement

# Serbia Resource Cities Program Best Practices Symposium Belgrade, Yugoslavia nt October 24 – 25, 2002





## TIMISOARA CASE STUDY: Online Property Tax System and Real Estate Database

#### **Introduction & Summary**

In July 2000, the city of Timisoara entered into a partnership under the Serbia Resource Cities Program (SRCP) with Cincinnati, Ohio, and Pancevo, Serbia. The main purpose of the partnership was to address service delivery issues facing the city of Pancevo, but Timisoara also benefited from the partnership and Cincinnati's advice. Visits to Cincinnati through the SRCP and to Ottawa through the Canadian International Development Agency (CIDA) provided important information and support for Timisoara's implementation of Tax.connect, a significant modernization project.

Tax.connect is a real estate database and online property tax payment system. It allows citizens and businesses to have access to all of Timisoara's records regarding tax levies on their land, buildings, and automobiles. In addition, it allows them to pay their taxes online through a convenient, easy-to-understand, and secure Internet-based system. Details of the system's implementation are as follow:

- Planning and implementation contract partners: Timisoara City Hall, BancPost (a computerized banking system), and the computer companies QCT Connect and Softnet. The work was awarded to the contractors through an open, well-publicized, competitive bid process.
- Cost: approximately 60,000 euros. Paid out of Timisoara's city budget. The city expects that
  the program will lead to decreased staff expenses and increased tax revenues, making this a
  very cost-effective investment.
- Timeline: The contract began in November 2001. Projected completion in October 2002.

#### **Problem Statement**

Timisoara has been recognized as one of the best-managed cities in Romania, but in the past 13 years it has faced many obstacles as well:

- The complicated transition from a centralized to a market-based economy has created a significant drain on already-limited financial resources.
- Collection of accurate data regarding the city's land and buildings has been made more
  difficult by the lengthy process of returning formerly state-owned properties to their rightful
  private owners.
- Information was very tightly controlled under the Communist system, which increased the
  possibility of corruption and fraud. There was the constant risk that policies might not be
  applied fairly, or that laws might not be enforced consistently.
- The citizens had learned to distrust their government and to have little confidence in its honesty, reliability, and effectiveness. This dampened citizens' interest in paying taxes to support the government's work.

• Citizens expected little from City Hall employees, who did not have the training and tools they needed to create a respectful culture and an attitude supporting good customer service.

As Mr. Dan Nica, the Romanian Minister for Information & Communications Technology, stated in July 2002: "A country cannot progress if it doesn't have high-quality services and respect for its citizens." The leaders of Timisoara are determined to create excellent services and to build an atmosphere of competence and respect, so the city can ensure a healthy and secure future for all its citizens. Tax.connect will help the city move in this direction. In turn, this progress will enable Timisoara to serve as a model for other cities in Romania and throughout Eastern Europe.

Specifically, city leaders are committed to assisting the nation as it prepares to enter the European Union. Tax policies and collection procedures are very important factors in this process. In 2002, the European Union report on Romania's tax policies stated,

Further modernization is required. Despite the efforts made in 2001, Romania's administrative capacities are still inadequate. Priority must be given to establishing national IT systems that are compatible with those of the Community.... Implementation of the national reforms will...depend on strengthening the tax authorities at central and local levels.

The Tax.connect system will greatly strengthen Timisoara's ability to manage its property tax system effectively.

#### **Project Description/Implementation**

Timisoara's leaders decided that Information & Communications Technology (ICT) would be a crucial tool in their efforts to:

- Increase transparency
- Increase City Hall's effectiveness and efficiency
- Create easier access for citizens to government services.

In 1996–2000, before the SRCP and CIDA trips, City Hall had begun three ICT-related projects:

- A geographic information system (GIS)
- A client service center/"one-stop shop" for direct services to citizens
- Information kiosks allowing greater accessibility of public information.

The trips to Canada and the United States reinforced Timisoara's commitment to these projects and its ICT strategy. In addition, the relationships created through the SRCP meant that City Hall staff members could call upon friendly, knowledgeable experts for assistance throughout the projects.

During the February 2001 trip, the Timisoara City Hall team saw that the property tax system of Cincinnati/Hamilton County is market driven, open, modern, and very responsive to citizens' needs. The transparency of such a system had several very important benefits:

- The citizens' needs are clearly expressed.
- It is easier for the government to collaborate and cooperate with other organizations.
- The public's trust in their government increases, as does their patience.
- The opportunity for fraud and corruption is greatly reduced.

Cincinnati's system links two servers: the city's real estate database and the Internet server. It provides the basis for a broader Internet-based banking system. The Internet information is updated nightly for security purposes.

#### Description

Tax.connect allows each user to check:

- · Descriptive information about land, buildings, and cars
- · The method in which the taxes are calculated
- Five years of historical data on past tax levies and payments
- Any past due (outstanding) payment amounts.

In addition, there is current and historical information available about:

- Laws governing the tax collection system
- Local council decisions regarding tax levies, payment systems, and penalties.

Part of Timisoara's system is already operational. The information kiosks developed to enhance citizens' access to public data already exist in locations throughout Timisoara. When Tax.connect is operational, these kiosks will allow citizens to access the real estate database and obtain information about their tax status, but the payment function will not be available. The information kiosks operate on an intranet model and will not be linked to BancPost.

#### Implementation

#### **Major Events in Project Development**

1996	The mayor initiates the GIS project.
Jan 2000	The first information kiosk is installed in City Hall.
Jan. 30, 2000	Ordinance #24 requires that by February 1, 2003, all major cities in Romania must implement an electronic tax payment system.
Mar 2000	The mayor modifies disposition Nr. 555/1997 to reduce bureaucracy in the Economic Department.
May 2000	Timisoara's Strategic Plan is finalized and includes a major focus on high-tech development.
Sep 2000	The network of nine information kiosks begins operating throughout Timisoara.
Feb 2001	SRCP trip to Cincinnati.
Sep 2001	CIDA trip to Ottawa.
Oct 2001	Timisoara leaders complete a comprehensive needs assessment to prepare for the bid process, and the city calls for competitive bids on the computer services contract.
Nov 2001	The Tax.connect contract begins.
Jul 2002	The Tax.connect system is unveiled to media, government ministers, city contracting companies, and representatives of banks and financial institutions.
Sep 2002	System testing underway.
Oct 2002	Projected system start-up.

The local media responded very well to the July 2002 demonstration of Tax.connect; coverage of the event was extensive, detailed, and objective, and clearly stated the benefits to the citizens. This response strengthened the relationship between City Hall and the media, which will help ensure that citizens will receive accurate and reliable information about the system when it is available for public use. In addition, Mr. Dan Nica, Minister for Information & Communications Technology, was at the public demonstration and clearly stated the national government's support of the project.

When testing is completed, an extensive media campaign will publicize Tax.connect and encourage citizens to use it. The goal is to encourage commercial and industrial companies to become the first users of the system. Because companies tend to be more sophisticated users of ICT—and because they are naturally concerned with cost-effectiveness and efficiency—they are likely to become early users of the system. And as employees of those companies become more comfortable with, and confident about, Tax.connect's accuracy and efficiency, they are likely to become early individual users.

#### **Key Results**

Tax.connect is already receiving nationwide attention: in 2002, QCT Connect and Tax.connect won the second-place award in a national ICT competition. Once Tax.connect is widely used, some of the tangible benefits of the system will be:

- *"Front Office" Convenience*. Citizens and companies can use the system from a variety of locations, including other countries. This will reduce the long lines at City Hall.
- Protection of User Information. Once a system user has registered, only one visit is necessary
  to Timisoara City Hall to obtain the required codes. This process ensures accuracy of the
  registration information and reduces the likelihood that the tax records will be accessed
  fraudulently.
- *Transparency.* Because citizens can see all the information the City Hall has regarding their tax situation, there is less chance for corruption and manipulation of the information.
- Confidence. Citizens will be more confident that their tax information is correct, and they will have greater confidence in the government that is collecting their taxes for public purposes.
- "Back Office" Accuracy. Citizens will check their tax information carefully, which will help identify errors in the city's records. In addition, the greater level of automation provided by the system will increase data accuracy.
- Security of Financial Information. A system of confidential codes and confirmations ensures that the interface between the City Hall portion of the system and the BancPost banking system is secure.
- Reduced Data Entry Expenses. City staff members will spend their time maintaining the
  database and ensuring that the system works reliably and effectively, rather than spending
  their time entering data from hard-copy transactions.
- Stabilization of Staff Levels. By creating another way for citizens to pay their taxes (and to get information about their tax status), City Hall will be able to reduce the staffing levels needed to provide citizens with one-on-one service. In addition, the seasonal cycles that lead to long lines in the spring of each year, for example, will become less dramatic.

Two remaining issues may become obstacles:

1. ISSUE: The *public's access to the Internet* is somewhat limited and increasing only slowly. Some citizens cannot, or do not want to, use the Internet for any financial transactions.

PLAN: The city plans to counteract this by building a service network that will be convenient and comfortable for citizens who want to pay their taxes in cash. Both the post office system and the existing network of CEC savings institutions (*Casa de Economie si Consemnatiune*) would serve this purpose very well. Citizens are accustomed to doing business at these organizations, which are distributed widely in neighborhoods throughout the city.

In exchange for their services to the city, the post offices and CEC branches will receive payment for each transaction and will experience greater foot traffic and visibility. They will benefit from taking part in this important tax collection function.

This network will allow the city to reduce City Hall staffing levels by externalizing the tax collection process to other institutions. These savings will offset the payments made to the post offices and CECs. Finally, when citizens find it easier and more convenient to pay their taxes in a timely manner, tax collection rates will increase.

The city plans to begin the logistical and financial negotiations with the post offices and CEC branches in late 2002 and will create this enhanced network by March 2003.

2. ISSUE: The *public's participation in the banking system* is limited, although it is less limited in Timisoara than in other parts of Romania. In addition, many citizens are unfamiliar with the more modern forms of electronic banking.

PLAN: This is an obstacle that will take time and education to overcome. One of the priorities of the city's strategic plan is to create the development of an "information technology culture," and education is an important part of this strategy. The leaders of Timisoara want to create a culture where information technology is used extensively to support the delivery of effective, efficient public and private services. In such an environment, citizens will be better able to access the information they need about their government, their finances, and other aspects of their lives.

#### **Lessons Learned**

- It is very important to stay close to the citizens throughout the process by listening to their needs, identifying important issues, resolving citizens' problems, being open with information, answering requests in a timely manner, and remaining committed to serving citizens better.
- There are great advantages to public-private collaboration.
- Collaborations among more than two institutions can succeed.
- An integrated information system has great advantages for managers: with better and more timely data, City Hall leaders and employees can make better decisions, faster.
- Increased use of information technology reduces the risk of corruption and fraud.
- The unification of the real estate database is key to the success of such a project.
- It is very important to clarify the roles and responsibilities of the data managers. This ensures the security of the data and facilitates the working relationship among different institutions.
- The simpler the system appears to the citizen, the better, but it takes a lot of hard work to achieve this simplicity.

Based on these lessons, the city's next steps are to:

- Implement Tax.connect successfully.
- Create the network of neighborhood-based payment centers.
- Link Tax.connect to the GIS.
- Enhance the real estate database with more information about apartments in large high-rise buildings (currently these data are incomplete).
- Extend collaborative efforts to other institutions (e.g., the Chamber of Commerce).







## SUBOTICA CASE STUDY: Establishing a Framework for Economic Development

Serbia Resource Cities Program
BEST PRACTICES SYMPOSIUM
Belgrade, Yugoslavia, October 24–25, 2002



# Serbia Resource Cities Program Best Practices Symposium Belgrade, Yugoslavia ement October 24 – 25, 2002







#### SUBOTICA CASE STUDY: Establishing a Framework for Economic Development

#### **Introduction & Summary**

Through the Serbia Resource Cities Program, the cities of Subotica, Serbia; Szeged, Hungary; and Akron, Ohio, entered into a municipal partnership to help Subotica address key management and service delivery issues. One key issue identified by the partners was to help the city develop a framework for economic development and understand the leadership role it must play in this process. Over the course of the last year and a half, the partners have made several exchange visits and have conducted an ongoing e-mail dialogue focused on the following objectives:

- Problem identification and exposure to current practices in economic development in Serbia and the United States
- Research and data collection on Subotica's current economic and development investment conditions
- A SWOT (strengths, weaknesses, opportunities, and threats) analysis of Subotica's economic development potential
- Formulation of an economic development framework for the city that focuses on the role of the municipal government as a leader and facilitator of economic development, and on the importance of effective partnerships with the private sector, NGOs, and other levels of government.

#### **Problem Statement**

Like municipalities throughout Serbia, Subotica is suffering from the ravages of the Milosevic regime, coupled with years of centralized government control. The Milosevic years particularly affected Subotica and other opposition-led cities, as resources and investments were diverted to cities that supported the regime. Approximately 28 percent of Subotica's workforce, or 16,000 people (out of a total workforce of 57,000) are currently unemployed. With an average annual per capita income of \$1,800 for those who are employed, the economic conditions are indeed severe. Of the 41,000 employed, approximately 23 percent are government service workers, 33 percent work in production enterprises, and 20 percent work in small retail and craft industries.

Due to the political, social, and economic uncertainty in Yugoslavia over the past decade, and the communist legacy of centralized control of the economy, the municipal government of Subotica does not have experience in playing a lead role in the community's economic development. The city's leaders have recognized that they lack an economic framework to positively affect the dramatic economic restructuring that is taking place in Subotica and throughout Serbia, and that they must take on a leadership role in ensuring the economic future of their community and the citizens they serve. This requires that they develop new management structures and skills, and develop effective partnerships with the private sector.

The transition to a democratic free market economy in Serbia is just beginning. Perhaps the most important commitment the Serbian government has made to this process is the recent passage of the Law on Local Self-Government. This new law, which will give municipal governments new authorities and means by which to impact their economic future, is the cornerstone from which economic development can proceed. Economic development requires that local governments be able to borrow money and incur municipal debt for badly needed infrastructure; establish economic development agencies to carry out projects; market themselves to attract new business and industry; acquire and sell land; conceive and implement development and redevelopment projects; and, most importantly, establish *local* priorities.

#### **Project Description/Implementation**

The Subotica–Szeged–Akron relationship was initiated in August 2000, when the three partner cities sent delegations, led by their respective mayors, to meet in Szeged, Hungary. (At that time it was not possible for the U.S. partners to travel to Serbia.) Although the first visit focused on solid waste disposal and wastewater treatment, economic conditions immediately came into focus as an important part of the partnership. Several more exchange visits followed to both Subotica and Akron. Szeged's Office of Strategic Planning has also participated in several meetings in Subotica, and has hosted officials from Subotica to share with them the lessons learned from Szeged's very successful economic development and strategic planning efforts.

The partners' objective was to create an overview of the current Subotica economy, identify successful initiatives and the various economic development providers in the Subotica region, and help the city's leaders develop a framework for conducting economic development. The partnership has also stressed the importance of carrying out economic development initiatives within the framework of a strategic plan for the city's future growth and development, and the partners have provided guidance to Subotica municipal officials in how to carry out a comprehensive, inclusive strategic planning process.

The exchange visits provided an opportunity for Akron to meet with municipal officials, NGOs, and private sector representatives and to work with Subotica to carry out a SWOT analysis. This analysis enabled the partners to evaluate key issues impeding effective economic development at both the local and national levels, identify current economic development practices and opportunities for economic growth, and collect data on Subotica's economic and development conditions.

One of Akron's first recommendations to Subotica was that the city establish at least one dedicated economic development staff position to coordinate the municipal government's economic development efforts and serve as a liaison to the private sector, NGOs, and donor community. Akron provided draft job descriptions that outlined recommended responsibilities, experience, and skills. Subotica indicated its intention to create a three-person economic development team, and sent one of the designated team members to Akron for a week-long training course. This hands-on training provided an overview of economic development in the United States, and in particular an understanding of how local government, chambers of commerce, NGOs, and the private sector can work in close cooperation to structure and implement economic development programs that meet their shared interests and objectives.

However, due to budget problems, Subotica's municipal assembly decided that it could not create new staff positions and instead made the decision to outsource the lead role in the city's economic development and strategic planning efforts to a consulting firm, Most-Hid. The city has signed a general agreement with the firm, but, as of this writing, has not yet provided the firm with a specific scope of work. Akron has offered to review draft scopes of work to help ensure that they meet the city's needs and provide Most-Hid with clear guidance on objectives and expected results.

Subotica did adopt another of Akron's economic development practices. After learning about Akron's practice of bringing the plethora of economic development providers working in the region

together to share information and resources, Subotica organized a similar forum during an Akron exchange visit earlier this year. The forum brought together representatives from the Regional Chamber of Commerce, the Council for Strategic Development, the North Backa District, the University of Novi-Sad, the Association of Entrepreneurs, the Serbia Labor Market Office, NGOs working in the economic development sector, the director of the regional USAID Community Revitalization Through Democratic Action (CRDA) office, and representatives from Most-Hid. The workshop was a useful opportunity to share information on current economic development-related projects and programs in the Subotica area, and has opened avenues of communication between providers that previously had not communicated regularly with one another.

#### **Key Results and Recommendations**

At the end of each exchange visit to Subotica, the Akron delegates briefed municipal officials on their key findings and recommendations, and gave written recommendations on next steps in formulating an economic development framework for the city. This framework, summarized below, focuses on the role of the municipal government as a leader and facilitator of economic development, and on the importance of effective partnerships with the private sector, NGOs, and other levels of government.

Six main themes of the economic development framework emerged as a result of the SWOT analysis, interviews with government, non-profit, and private sector representatives, and accompanying data collection. These themes represent the primary challenges that Subotica must address to establish an effective economic development program for Subotica.

#### Establish an Organizational Framework for Economic Development Planning

A significant amount of economic development planning is taking place in Subotica. The Office of the Mayor, the Institute of City Planning, the Chamber of Commerce, Council for the Regional Agency for the Development of Small and Medium Enterprises, Association of Entrepreneurs, and a variety of outside agencies (including the newly engaged consulting firm of Most-Hid), are driving forward in anticipation of new laws that will energize commerce. However, many of these efforts have not been coordinated with the city of Subotica, and as such have not been as effective as desired. Akron has advised from the beginning of the partnership that Subotica should spearhead and coordinate its economic planning, and cannot outsource this function. This recommendation was echoed in a report from an expert who spent four weeks in Subotica earlier this year with funding from the USAID CRDA program.

The lack of oversight and coordination points to the need to create an Office of Strategic Planning within the city of Subotica that can coordinate and direct economic development programs. Most-Hid, the consulting firm that the city has engaged, can play an important role in this interim period by assisting the city in creating the necessary framework—provided the firm is given a clear mandate and scope of work. Most-Hid should locate a staff person in the Subotica City Hall who can interface with key municipal departments on a daily basis. This daily contact must include representatives from the Office of the Mayor and the Institute for City Planning at a minimum, as well as key members of the Executive Board.

The preparation of a strategic economic development plan should be the new office's first priority. The plan can serve as a policy and programmatic management tool for the city and its partners. The plan can also demonstrate to private investors and the international donor community that the city has a clear roadmap for its future development, and can significantly aid Subotica's case for financial assistance from the Serbian national government, the European Union, the World Bank, USAID, and other bilateral donors.

Subotica should prepare its strategic plan in *partnership* with the private sector and other community stakeholders. The plan must reflect private sector priorities, needs, and opportunities for investment. The city of Szeged has offered technical assistance in creating such a strategic plan framework, based upon its own experience in drafting such a plan. In addition, Subotica

should create a Business Advisory Committee, comprised of a cross-section of business, industry, and NGO representatives to provide guidance and input into drafting the strategic plan (see below for further discussion).

Developing a Relationship of Trust Between Government and the Private Sector (Creating a Business Advisory Committee)

A partnership approach between the private sector and Subotica government is necessary to bring about effective economic change. Subotica should establish such a civic partnership, in the form of a Business Advisory Committee, to forge the new economic direction for policy and program implementation. The committee's first task should be to provide input into the city's strategic economic development plan. Drawing upon representation from private companies, nonprofit organizations, the University of Novi-Sad, banks, the Chamber of Commerce, the Institute of Town Planning, and the city's various departments including the Office of the Mayor and the Executive Council, such an advisory committee can also create the framework for ongoing economic planning.

Subotica has firm plans to establish such a committee. During a visit to Subotica in August, the Executive Board member responsible for economic development told ICMA's partnership manager that the city would commit to creating what was tentatively called a Council for Development. The council, which the city said it hoped to create by October 2002, will serve as an advisory body to the municipal government on strategic planning and economic development issues, and will draw its members from the various stakeholder groups identified above. Akron and ICMA stressed the need for Subotica to designate a staff person to coordinate the council's work and serve as a link back to the municipal government. If the council is created as planned in October, it may be possible to organize a final partnership exchange to Akron focused on helping the leaders and staff of the council develop a clearly articulated mission and work plan, and to expose them to how similar entities in the United States function.

Strengthening the municipal government's relationship with the provincial and national government is another important objective, particularly in terms of reforming the institutional framework for investment. Subotica and other municipal governments should work together to lobby the national government on suggested changes to banking laws and the privatization process that can help attract new and existing businesses from Eastern and Western Europe and within Serbia.

#### Infrastructure, Financial Resources and Good Management

The city must make obtaining funds to improve infrastructure and services a priority. Without a sound infrastructure system of water, storm and sanitary sewers, reliable energy sources, and a solid transportation network, economic development will not occur. Reliable municipal services such as fire and police protection and waste removal, and sound and transparent municipal management, are also critical to support existing businesses and attract new investments. As noted earlier, a strategic plan would be beneficial to support the city in its efforts to obtain funds for infrastructure improvements and economic development initiatives from the Serbian national government and the international donor community. The plan can demonstrate clear and logical goals and show that the city has developed a methodology for achieving economic recovery and growth.

#### **Economic Opportunities**

Although private investments in business and industry have been absent in recent years, Subotica has a strong industrial heritage and a technically competent workforce that can attract private investors. The region's rich agricultural, food, and beverage industries are a strong asset that can be expanded and used as a base for new industrial initiatives in foodstuff processing, frozen foods, canned food technology, and fresh market delivery systems. Other industry clusters that have potential to grow include machine building, textiles, and transportation equipment manufacturing and repair.

Tourism is well positioned to thrive once again, thanks to the appeal of Subotica's beautiful and historic downtown; its potential for greater shopping, arts, and cultural activities; and the history of tourism in the Lake Palic resort area. There are a number of specific initiatives that will create the proper environment to expand this significant economic sector of the economy, such as the environmental clean-up of Lake Palic, which is discussed in another case study.

Perhaps the most importance economic opportunity for Subotica is its geographic position as a gateway to Eastern and Mediterranean Europe. Its strategic location relative to Hungary and its unique relationship with the city of Szeged make Subotica a logical point of transfer for goods and services to and from the European Union, which Hungary is slated to join in 2004. One of the first economic initiatives that should be undertaken is to upgrade the Serbian side of the border-crossing station with assistance from the Serbian government and the European Union (upgrades to the Hungarian side have recently been completed). The upgrades will greatly improve the flow of persons (business travelers, tourists) and goods in and out of Serbia. A longer-term objective is to position Subotica as a transfer center for the exchange of imported and exported goods. Improved transportation infrastructure in the form of improved access roads, train facilities, and transfer and storage facilities will be important to achieve this objective.

A local action that would facilitate business privatization in the Subotica region would be to form a local advisory committee to identify and directly assist potential businesses. Most-Hid and its associates have the business and financial background to assist in advising local and foreign investors how to navigate the Law on Privatization.

Assistance to small and medium-sized enterprises (SMEs) is another important element in expanding Subotica's economic base. As in Akron, the majority of employment in Subotica is generated by SMEs. Most-Hid possesses the expertise to establish a technical assistance program to advise businesses on preparing business plans, obtaining loans from local banks, and expanding their operations. A number of SME support initiatives are already underway, but better coordination and cooperation among them will allow SMEs to achieve maximum leverage of their resources.

#### Education and Workforce Development

A fundamental component of economic development is strengthening both the secondary and post-secondary educational systems. During exchange visits to Subotica, Akron staff frequently heard about the lack of technically trained high school graduates. It is important for Subotica to upgrade its educational facilities and curricula in order to advance the local economy. This component must be incorporated into the strategic plan process and receive a high funding priority. Subotica should immediately seek grants and financial assistance from educational foundations, the European Union, and other donors. Workforce training in industry-specific clusters should also be a desired targeted initiative. The University of Novi-Sad can be an important partner in this process.

#### Coordination Between Providers

As discussed previously, regular interface among economic development providers is critical to ensure proper planning coordination. Regularly scheduled meetings of the key managers of these agencies and offices will result in efficient delivery of economic development services.

#### **Lessons Learned**

#### Building Trust Between the Public and Private Sectors

A common thread among the private sector, non-profits, banks, and other quasi-governmental entities is their lack of confidence in local government to effect economic change. This lack of trust and confidence is the most important stumbling block to economic change. Local government must strive for consistent, workable policies and regulations that permit private sector

entities to know the rules by which they can conduct their business. The city of Subotica must maintain open lines of communication with the private sector companies to ensure an open, ongoing dialogue.

#### Serbian Law on Privatization

A sustained momentum of privatization is necessary to demonstrate to private business and industry that Serbia generally (and Subotica specifically) is prepared to transition companies, land, machinery, equipment, and property to private ownership. The Law on Privatization is one of the foundations from which local economic development will rise. The national government should give a higher priority to privatization, which should include input from private sector businesses to ensure implementation of a workable set of regulations that will allow a smooth and efficient transition from government to private ownership. The government should also coordinate with the banking industry so that financing of privatization initiatives is available.

The opportunity to buy and sell land in a fair and equitable manner is critical. This will require a new system of land oversight including local documentation of land ownership, legal surveys of all land transactions, title companies to certify equitable buying and selling of all property, and of course a legal recordation of land sale transactions by the local government. Municipal governments need access to land and buildings as resources to leverage in their local economic development efforts. The passage of a law on property and establishment of a transparent, efficient process for transferring ownership of state-owned buildings and land to municipal governments are also critical. For example, Subotica's plans to create a small business incubator have been stymied for over a year by the city's inability to obtain control over the former military barracks where it would like to locate the incubator. Once local governments are empowered with legal title to own real property within their own jurisdictions, an enormous gap in the potential to attract outside investors will be closed.

#### Serbian Law on Local Self-Government

The continued fine-tuning and implementation of the Law on Local Self-Government is equally important. This law will pave the way for local municipal initiatives in economic development through the establishment of local economic development agencies or institutions that can design and implement projects. This law will also give municipal governments greater financial autonomy through greater control over local tax revenues and through the ability to introduce new own-source revenues; issue debt and make investments in public infrastructure; and acquire land for development projects, industrial parks, and business incubators.

#### Coordination Between Economic Development Providers

Economic development stakeholders should continuously share information. Economic development providers operating independently of each other will prolong successful economic transition, lead to duplication of effort, and squander rather than leverage resources. An organized effort to meet regularly is necessary to prevent overlap and ensure the efficiency and effectiveness of economic services. The city and its new Council for Development should coordinate this interaction.

#### Conclusion

Establishing an economic development framework in Subotica is a prerequisite to economic recovery. By taking incremental steps in revitalizing the local economy, Subotica can overcome its economic challenges. One success story at a time will lead to another success and, eventually, will add significantly to Subotica's economic recovery. The table below lists recommended actions for Subotica in undertaking economic development.

### **Appendix: Recommended Actions and Parties Responsible**

	Recommended Actions	Timeframe	Responsible Party
1.	Create a Strategic Planning Office	Immediate	City of Subotica
2.	Establish a Business Advisory Committee	(Underway)	City of Subotica, Most-Hid
3.	Seek funding for strategic planning	Immediate	City of Subotica, Most-Hid
4.	Seek funding for infrastructure	Ongoing	City of Subotica, Most-Hid
5.	Education/workforce training	Ongoing	Most-Hid, University of Novi-Sad
6.	Tourism plan	Immediate (Update)	Most-Hid, Strategic Planning Office
7.	Cross-border project	Immediate	Most-Hid, city of Subotica, city of Szeged







## KRAGUJEVAC CASE STUDY: Exploring Options for Effective Service Delivery

Serbia Resource Cities Program
BEST PRACTICES SYMPOSIUM
Belgrade, Yugoslavia, October 24–25, 2002



Serbia Resource Cities Program
Best Practices Symposium
Belgrade, Yugoslavia
ement October 24 – 25, 2002





#### KRAGUJEVAC CASE STUDY: Exploring Options for Effective Service Delivery

#### **Introduction & Summary**

The cities of Kragujevac, Serbia; Pitesti, Romania; and Springfield, Ohio, established a three-city partnership in July 2000 through the Serbia Resource Cities Program (SRCP) to provide technical assistance and support to democratically minded municipal leaders within the Republic of Serbia. The SRCP was created to improve service delivery and increase the understanding and support for democratic local government in Serbia. The program targets the following strategic areas that reflect USAID's priorities: encouraging broad-based economic growth, strengthening democracy and good governance, and building human capacity through education and training.

The partnership focused mainly on the city of Kragujevac, but as the exchanges progressed, it became apparent that Kragujevac and Pitesti shared many parallels. The partnership exchanges then incorporated suggestions and technical discussions to benefit Pitesti as well. The cities developed strategies to strengthen local democratic government, with the intention that Kragujevac and Pitesti would emerge as role models of successful local democracy in Eastern Europe.

In an effort to strengthen local government by ensuring efficient delivery of basic public services, representatives from the three cities examined current service delivery levels and explored options for improving services. During the initial exchange, Springfield staff met with the mayors from the two partner cities to examine the organizational structure and culture of their cities and to discuss services provided by each department. The discussions led to further investigations into water, wastewater, and solid waste services. Springfield's Senior Project Manager, who formerly held the position of Utilities Director for over 25 years, worked with department managers and line staff to evaluate the current service delivery methods.

#### **Problem Statement**

Kragujevac and Pitesti are cities in transition. The elected officials from Kragujevac and Pitesti are working to streamline service delivery while improving service quality. Springfield has also experienced a similar economic transition. In the early 1980s, Springfield endured a devastating financial crisis due to an extended layoff of thousands of Springfield's citizens by the city's largest employer. During this time, unemployment soared, service quality declined, and the economic health of the city suffered. The City Manager and Senior Project Manager have shared their experience and the lessons learned from that period in Springfield's history with local leaders and administrators in Kragujevac and Pitesti.

Perhaps the most prominent service delivery issue in Kragujevac involves the water treatment and delivery system. The Gruza Water Treatment Plant and Reservoir in Kragujevac consists of a concrete dam, its associated reservoir, and a water treatment plant. The water treatment plant has difficulty producing high-quality water on a daily basis, due to the shallow depth of water in the reservoir and the high level of organic material found in the shallow water. These organics cause taste and odor problems in the treated water.

The partners have also examined the Morava Wellfields and have discussed improvements. The city wellfield sits next to the Morava River and consists of 14 Ranney-type wells that range from 3 to 10 meters in diameter. When this wellfield began operating, it could produce 500 liters of water per second (L/s). The capacity has dropped to 150 L/s, which indicates a need to recondition the wells.

Improvements and continued maintenance require funding that is sometimes unavailable. Thus, it is important to explore the revenue side of water service operations. Springfield's Senior Project Manager examined the water distribution networks in both Kragujevac and Pitesti. Both cities, but especially Kragujevac, experienced a significant amount of water loss from the distribution network: in Kragujevac these losses were between 40 and 50 percent of the treated water. Such water losses represented lost revenue, as half of the product leaving the treatment facility was wasted.

#### **Project Description/Implementation**

To address these pressing service delivery problems, staff from the three cities developed strategies to address the immediate needs and plan for future improvements. Because Springfield does not have a reservoir system, a representative from the city of Lima, Ohio, joined the discussions during visits to Springfield so that the partners could share strategies and ideas. Expanding the local commitment of the partnership proved beneficial, as it brought additional perspectives to the discussion.

Regarding the Gruza Water Treatment Plant, Kragujevac staff indicated that they understood the shallow depth problem and were exploring ways to improve the situation. The partners discussed strategies for immediate improvements, which included installing ozone equipment that would add a preozonization process to the existing treatment process. This additional step would help eliminate the taste and odor problems from the finished water. Additionally, the cities explored the idea of taking water from different areas within the reservoir, since drawing water from deeper depths would reduce the amount of organics in the water. To determine the best location from which to draw water, Kragujevac staff would need to perform daily sampling in the reservoir. After determining the best area, Kragujevac staff could adjust pump depths to pump water with the least organic material.

Maintenance strategies were the key solution for the Morava wellfield issues; however, long-term preventive maintenance will require higher levels of funding than are currently available. The decrease in water production from this wellfield is a result of insufficient reconditioning of the wells over an extended period. Kragujevac water company staff continue to work on the reconditioning of the wells and are increasing production levels, but it will take some time to get the wells and pumps back to full working condition. The partners discussed strategies for reconditioning at least two wells per year, as well as expanding the wellfield area to supply a higher quantity and quality of water to the citizens.

Finally, the partnership working group examined water audits and leak detection surveys as a way to improve the delivery system and reduce the amount of lost water. Kragujevac first conducted a water audit and identified areas of water usage that were unmetered, but still used for intended purposes—thus, not actually wasted. For instance, public drinking fountains are used very often; these fountains are not metered, but the water is not lost. Determining such unmetered usage allowed the city to reduce the documented percentage of water loss. Second, the city examined each address and checked to see that the water service at that address was metered. As city staff checked the meters or put them in place, they also implemented appropriate billing systems.

#### **Key Results**

Opportunities for continued improvement in both Kragujevac and Pitesti still exist. The city of Springfield itself has worked for more than ten years to change the economic condition of its community. Springfield's largest employer has opened its doors once again, but the threat of additional layoffs still looms. As the three partner cities share ideas and experiences, they are constantly reminded that transition economies cannot be turned around overnight and that service delivery improvements will also be incremental because cities depend on tax revenues and service fees to ensure the high quality of the delivered product. Though these are known realities, articulating them with local government peers helps all three cities stay on task to seek long-term solutions.

Though the taste and odor problems have not been completely solved, Kragujevac's staff have taken interim steps to improve water quality. The city has examined unmetered water distribution, started to document the areas with unmetered water accounts, and significantly reduced the percentage of unaccounted-for water. Having discovered that many apartments in the city were not metered, Kragujevac officials applied for and received a 5-million-euro low-interest loan from the European Union. With these funds, the city will install new meters in all apartments and will begin billing for the actual water used, rather than the underestimated flat rates. City officials will use a portion of the low-interest loan to reinforce water connections, which will decrease the water leaks in the system. As Kragujevac collects actual revenues from water consumption and water leaks continue to decrease, the funds earned and saved will support the maintenance and improvements of the reservoir and wellfield area.

#### **Lessons Learned**

Improving service delivery in any city requires long-term investigation and effort. Cities need time to evaluate the impact of ideas and then to implement plans. With this in mind, the three cities quickly learned that to carry out the activities outlined in the partnership action plan would require time, effort, and dedicated staff members. The cities planned to develop projects and establish programs that would lead to quick results, but it soon became clear that complicating factors, such as centralized state government control and newly emerging market economies, would pose great challenges. However, it is important to realize that these challenges can be overcome. Transition markets and emerging democracies must create sustainable partnerships, at the local level, to assist with innovative ideas because such partnerships make long-term success more likely. Kragujevac, Pitesti, and Springfield have sought a way to implement sustainable problem solving and supportive programs to maintain consistency in local government leadership and administrative strategies throughout Eastern Europe. To this end, the cities signed a formal Sister Cities International agreement. This agreement will enable the cities to continue developing service delivery strategies that are creative and efficient, building stronger support for democratic local government, and enhancing economic development opportunities.

#### **Future Activities**

Kragujevac continues to make improvements in metering the water the city supplies to its citizens. In addition, work continues to repair equipment that was left or damaged in the late 1990s. Springfield will continue working with water and wastewater treatment personnel to establish routine maintenance plans, which will ensure that treatment equipment remains in good working order long into the future.

In an effort to continue improving service delivery in Kragujevac and Pitesti, Springfield will work with both cities to develop Geographic Information Systems (GISs). Springfield plans to work with a local nongovernmental organization (NGO) in Pitesti to create a GIS. The NGO will request funding from the European Union to partner with Pitesti City Hall in establishing a "one-stop shop" for city construction permits and plans. As part of this one-stop program, the NGO will take the

lead in financing the development of Pitesti's GIS. Springfield staff will work with the NGO to share creative strategies.

Kragujevac's Urban Planning Company has worked with digital geographic files for many years. Springfield GIS staff will travel to Kragujevac to assist the planning company in transferring Computer Aided Drafting (CAD) files to GIS files. Additionally, the team will supply hard copies of materials related to the CAD files and convert that information to digital formats that can then be interlinked to create a complete GIS. Planning company staff have completed much of the difficult work in digitizing geographic information; Springfield and Kragujevac representatives will work together to establish a GIS based on this information that can be used by both City Hall and the citizens of Kragujevac.

Once the GIS is established, the geographic data will be converted to an Internet-based system that will be accessible to citizens, developers, or other interested parties worldwide. Today, persons coordinating new construction in the city must go to many different companies to determine where underground lines and infrastructure exist. With the Internet-based GIS, persons interested in new construction will be able to determine this information from their computer. Not only will this be a state-of-the-art service provided by Kragujevac City Hall, but it will enhance the city's economic development potential as well. The planning company will be responsible for gathering and maintaining the data that will support the new system, and Springfield will offer continued technical support.







## NIS CASE STUDY: Redeveloping the Nis Airport

Serbia Resource Cities Program
BEST PRACTICES SYMPOSIUM
Belgrade, Yugoslavia, October 24–25, 2002



Belg European Movement Oct

Serbia Resource Cities Program
Best Practices Symposium
Belgrade, Yugoslavia
nt October 24 – 25, 2002





#### NIS CASE STUDY: Redeveloping the Nis Airport

#### **Introduction & Summary**

In July 2000 Nis entered into a three-way partnership with Sofia, Bulgaria, and Columbus, Ohio, through the Serbia Resource Cities Program. The partnership has transferred successful U.S. municipal models in the areas of water and wastewater management, public information, and economic development. In connection with the focus on economic development, the city of Nis requested assistance in the redevelopment of a former airport facility. Both Columbus and Sofia have redeveloped their own airports, and agreed to transfer techniques and provide technical advice on the redevelopment of the Nis airport.

The Nis airport has a desirable location in southeastern Serbia and presents strong potential for economic development in the region. There are about 2 million people living in the southeastern region of Serbia, working in about 5,000 small and medium-sized companies and producing about 20 percent of the gross national income. Nis is the second largest city in Serbia and is the administrative, educational, and business center of southeastern Serbia. Nis is located at the intersection of the major roads connecting Western Europe with the south (Greece) and the east (Bulgaria, Turkey, the Middle East). The distance from the Aegean Sea to the south and Adriatic Sea to the west is less than 300 miles. The excellent weather conditions of the Nis region are conducive to air traffic, making the Nis airport (www.airportnis.co.yu) the first alternative airport for the four nearby international airports—Belgrade, Skopje, Sofia, and Pristina.

The Nis airport, which the city recently acquired from the national government, is in transition following the significant political changes that took place in Serbia in 2000. Previously used as both a civilian and a military airport, the airport is currently unusable, as the runway was destroyed during the NATO military strikes against the Milosevic regime. Nis has received a grant from the Norwegian government to repair the airport's runways so that the airport can be run as a facility specializing in cargo operations. This work began in 2001 and is scheduled to be complete by summer/fall 2003.

Accompanying the physical improvements, the Resource Cities partners worked to improve the airport's management structure, as well as the airport's relationship to the military and to local businesses, which stand to benefit from more efficient use of the airport. The partners also worked to define the role of the Nis airport in the economic development of southeastern Serbia. Using this strategic approach, Nis can promote business and cargo development while the runway is being restored. For this project, the redevelopment of Rickenbacker International Airport in Columbus, Ohio, was an invaluable experience upon which Nis could base its own airport redevelopment efforts.

#### **Problem Statement**

The Nis airport was established in 1986 as an enterprise independent of the military but with joint facilities for both civilian and military traffic. The airport's development and the air traffic flow were

Nis: Redeveloping the Nis Airport

hindered by the economic and political crises in the region. Even in such difficult circumstances, the airport managed to survive largely because there was a significant need in the region for air transport and because the airport expanded its facilities to include a terminal for customs trucks.

After the political crises ended and Serbia embarked on a new path of economic development, the need to define new strategies for the airport's development as a part of the region's overall economic development intensified. In 2002 the Nis airport became a public enterprise owned by the city of Nis. With its Resource Cities partners, the city set out to develop a strategic plan for the future development of the airport that would harness its economic development potential.

#### **Project Description/Implementation**

The partners' work aimed to incorporate the successful experience of Rickenbacker International Airport into practical solutions and a new strategy for the development of the Nis airport. As an initial step in the project, James Maco of Rickenbacker Airport met with Nis airport officials to discuss airport design, management, and operations. Because the purpose of the airport redevelopment is to attract businesses to Nis, the Columbus team strategized with airport officials about the importance of collaboration with other economic development players, including the city of Nis and key private sector partners.

The Nis airport shares many characteristics with Rickenbacker International Airport in Columbus and could benefit from Columbus's experience with redeveloping its airport. Rickenbacker specializes in cargo transport but also serves charter passengers and the military. The airport, which opened in 1942, is located in the southeastern corner of Columbus and was formerly a military base (Lockbourne Army Air Base). When the base was closed in 1979, the county government created the Rickenbacker Port Authority (RPA) in response. In 1980 the site became an Air National Guard base (which still occupies part of the land). In 1984 the U.S. government transferred an initial 665 hectares of military property to the RPA. There have been three phases of Rickenbacker's redevelopment. Phase I consisted of recovering lost jobs and payroll. Phase II (1991–1999) focused on industrial park and distribution facility development, as well as promotion of air cargo growth to make use of the distribution facility. Phase III is currently underway and deals with airport and intermodal development—intense expansion of aviation and ground transportation.

Based on the review of the operations at Rickenbacker, the partners decided that the following were necessary elements of the strategic plan for the Nis airport:

- Development of the new relationship between the public enterprise and the Army regarding
  the use of the airport complex. By the decision of the federal administration, the Nis airport
  was declared a civilian airport, and conditions under which the military will use the facilities
  have to be clearly defined. These conditions need to address shared duties for maintenance
  and general responsibilities of both parties in the future.
- Staffing and organization of the following divisions: security, airfield maintenance, snow removal, firefighting services, maintenance of the airfield lighting system, and employee training in specific fields.
- Establishment of the relationship between the airport and the local business community, prices for the airport's services, contracts, and incentives for the largest clients.
- Creation of a marketing plan to inform potential clients about the benefits of using the airport's services. The marketing plan should include a concrete strategy for encouraging airlines to open offices at the airport and promoting the airport's services.

The visit to Rickenbacker International Airport by the delegation from the Nis airport consisted of two working sessions. At the first session, the management of Rickenbacker Airport presented the airport's organizational chart as well as other documents, such as the airport's master plan and map of facilities. Based on the details presented, as well as extensive documentation collected

during this working visit, Nis airport officials implemented to great extent the model of Rickenbacker Airport, particularly related to developing a master plan for the Nis airport and planning the layout of the airport facilities.

At the second session the delegation from the Nis airport received a presentation on and detailed explanation of the following:

- 1. Formal definition of relations between the RPA, the military authorities at the airport, and handling agents, such as:
- The terms of the contract (Joint-Use Agreement) between the RPA and military authorities for use of the airport
- The terms of the contract (non-exclusive license agreement to conduct an aeronautical business at the airport) between the RPA and handling agents
- An operating agreement for a limited services operator
- Minimum standards for operators of commercial activities
- Airport rules and regulations.
- 2. Organization of departments, including approaches to cooperation between the civil and military parts of the airport, as follows:
- Employee training: requirements and means of training employees, as well as licensing employees to perform particular operations.
- Aircraft refueling: organization of the aircraft refueling service and equipment for aircraft refueling.
- Snow removal: organization of the cleaning department, plan for snow and ice removal, and snow removal equipment.
- Security procedures: airport access procedures for the air operations area and security procedures for airport contractors.
- Maintenance: organization of the maintenance department and maintenance of the airfield lighting system.
- Air traffic control (ATC): organization of the ATC department, cooperation with ATC staff, and maintenance of radio-navigational equipment.
- Firefighting: organization of the firefighting department and firefighting equipment.

Definition of relations between civil and military authorities and handling agents, as well as the organization of the airport departments, is of great importance for efficient functioning of the airport. Considering that the Nis airport, like Rickenbacker, is a mixed-use airport, the positive experience of Rickenbacker in defining these relations and organizing the airport departments as presented during the visit are of great importance for the Nis airport.

Nis will implement its airport redevelopment plan in three stages:

- 2002—June 2003: Reconstructing facilities, developing the marketing plan, implementing the
  plan through contracts with airline companies and local businesses, and preparing for the
  airport's reopening.

• July 2004: Further intensifying the development of cargo traffic in accordance with the region's business development and establishing scheduled cargo flights to destinations both in the region and around Europe.

#### **Key Results**

Even before the airport reconstruction program is complete, Rickenbacker Airport's experience can help Nis immediately capitalize on its airport's potential as a development tool. Expected benefits are:

- Precise definition of the relationship, rights, and responsibilities of the Nis airport and the military, in a manner that will not be detrimental to either passenger or cargo traffic.
- Application of the Rickenbacker Airport model in the area of relations between airlines and handling agents at the airport complex and procedures to ensure a high level of security and avoidance of mutual interference.
- Application of the Rickenbacker Airport model in the area of cost-effective technical maintenance and employee training.
- Application of the Rickenbacker Airport model in relations with handling agents and other
  clients concerning prices and other conditions of service and in development of the marketing
  plan to stimulate faster development of cargo traffic and establish scheduled flights as quickly
  as possible.

#### **Lessons Learned**

With the strategic plan for redeveloping the Nis airport, the city of Nis and the airport management hope to take maximum advantage of the Nis airport's advantages to develop intensive cargo traffic in addition to passenger traffic. The excellent geographical location in southeastern Europe, superb road infrastructure around Nis, stabilization of the political and economic situation, and exceptional meteorological conditions give the Nis airport great potential for development. To avoid delays and mistakes, the experience of the Rickenbacker Airport will be invaluable in the development of the Nis airport and southeastern Serbia as well.







### PANCEVO CASE STUDY: Improving Drinking Water Supply, Distribution, and Central Heating Management

Serbia Resource Cities Program
BEST PRACTICES SYMPOSIUM
Belgrade, Yugoslavia, October 24–25, 2002



Belgrad

European Movement October

Serbia Resource Cities Program
Best Practices Symposium
Belgrade, Yugoslavia
nt October 24 – 25, 2002





#### PANCEVO CASE STUDY: Improving Drinking Water Supply, Distribution, and Central Heating Management

#### **Introduction & Summary**

In July 2000, under the Serbia Resource Cities Program, the cities of Pancevo, Serbia; Timisoara, Romania; and Cincinnati, Ohio, established a partnership to address priority management and service delivery issues, in particular those facing the city of Pancevo. A key issue identified by the partners was Pancevo's severe problem with water resources. The shortage of water resources affects the city's drinking water supply as well as the operations of its central heating system, which relies on distribution of piped hot water.

Over the past two years, engineers from the Pancevo Water Works Company (PWWC) and Cincinnati Water Works (CWW), with some technical input from their peers in Timisoara, have worked together to share technical information; evaluate problems; identify tools, strategies, and management techniques; and develop action plans for improving the efficiency and effectiveness of PWWC and Heating Company of Pancevo (HCP). Additionally, Cincinnati staff helped PWWC and HCP evaluate the best use of a \$100,000 grant for infrastructure improvements that USAID provided through a related ICMA-administered grant program.

#### **Problem Statement**

Pancevo relies on groundwater well collection and a treatment system that was originally constructed in 1963 with some minor upgrades during the 1970s and 1980s. Treated water is pumped directly into the system via variable speed pumps with no water storage facilities in Pancevo, making pumping facilities vital to the community. The distribution network is also relatively aged. The majority of the network consists of unlined cast iron and steel pipelines, and very little funding has been available for preventive maintenance, pipeline replacement, and capital upgrades, in particular under the Milosevic regime in the 1990s. Based on initial discussions with officials from Pancevo, the partners decided to focus their technical support efforts on technical and organizational issues related to water treatment/quality, water distribution, and heating/hot water distribution.

PWWC, HCP, and CWW identified four critical areas to address:

- The best use of the \$100,000 grant from USAID to: (1) provide critical laboratory equipment to analyze the quality of water and the ability to adequately treat the water, (2) replace key equipment for reliably and efficiently pumping an adequate quantity of water at sufficient pressure to the citizens of Pancevo, and (3) replace critical equipment to reliably operate the city's central heating system.
- Poor performance of the groundwater wells. Pancevo experiences extremely high failure rates
  of the wells that provide water to its treatment plant. Pancevo has approximately 90 wells that
  have a very short operating life of five to seven years. The short operating life results in ineffi-

cient use of the wells and excessive capital expenditures on replacing the failed wells. Even when a well is replaced, a new well is only expected to last about the same time: five to seven years. This frequent need to replace wells is a tremendous burden on limited available funds for capital improvements and infrastructure maintenance.

- Leakage within the distribution system. The losses of treated water in the distribution system
  are approximately 35 percent (including metering losses). This compares to an industry
  standard in the United States of 15 percent leakage losses. Pancevo had just begun
  investigating leak detection equipment before the partnership began, but lacked experience
  with this technology and funds to procure it.
- The ability to provide sufficient and reliable heat to the citizens of Pancevo. In addition to a desperate need for spare parts, the heating distribution system, as designed, is unable to distribute heat evenly throughout the city, does not have sufficient measuring equipment to adequately bill its customers and generate revenues, and has numerous small heating facilities that are inefficient to operate and expensive to maintain. Additionally, like PWWC, HCP has aging pipelines and leakage concerns within its heated water pipe network. This problem is compounded by the fact that the leakage reduces the temperature of the water and the system's ability to provide adequate heating to its customers.

Finding solutions to the critical areas described above will directly support PWWC's goal of providing a plentiful supply of high-quality water. This goal is vital for meeting the needs of PWWC's current customers, attracting new economic growth to the city, meeting the demands of growing or new businesses, and expanding the water service area to neighboring villages. If PWWC can reduce the losses of water from the distribution system through a leak detection program, the existing treatment capacity and infrastructure will be better positioned to meet current and future water demands.

HCP's situation is similar to PWWC's. HCP's basic mission is to produce a sufficient quantity and quality of heat for all its customers in an environmentally responsible and cost-effective manner. HCP obtained critical spare parts through the USAID grant program, but HCP must also reduce energy losses to achieve its objectives of providing a more cost-effective service and preventing environmental pollution. Producing the heat more cost effectively and reliably will also enable the company to attract and serve new customers.

#### **Project Description/Implementation**

Over the course of several exchange visits to Pancevo, Timisoara, and Cincinnati, the partners addressed the issues described above through meetings with key technical staff, site visits, demonstrations of different technologies and equipment, and on-site training. Key aspects are summarized below.

#### Procurement of Equipment

Laboratory Equipment. Key laboratory equipment that PWWC needed to monitor the operation and performance of the water treatment process had failed. Through the USAID grant program, PWWC and CWW determined that a spectrophotometer (which analyzes the water for various chemical parameters), and a turbidimeter (which measures the clarity of the water) were critical components to continued production of high-quality water. ICMA helped PWWC purchase both devices, which were installed by the summer of 2001 and allowed for more effective treatment of the water, resulting in the production of higher-quality drinking water.

*Pumping Equipment.* A critical pump component, called a variable frequency drive, had failed at the water treatment plant. This device allows the electronic adjustment of the pump speed and flow rate, which is critical for providing and maintaining adequate pressure in the water distribution system. With part of the USAID grant, ICMA helped PWWC purchase a replacement drive, which was installed in early 2001 and has greatly improved the ability to provide adequate water service to PWWC customers.

#### Well Cleaning and Maintenance

The PWWC obtains its source water from an extensive groundwater well system consisting of three separate well fields with a total of about 90 wells. As noted earlier, one of the problems the company encounters is that the wells only produce water for about five to seven years. When a new well comes online, it operates satisfactorily for several years and then begins to lose capacity, until it becomes plugged and must be abandoned. As a result, PWWC must drill new wells or rehabilitate abandoned wells very frequently and at a significant cost. The partners discussed potential causes for PWWC to investigate to determine the source of the problem and possible solutions to increase the life of the wells.

Like PWWC, CWW has groundwater wells at one of its treatment plants and must perform regular maintenance to keep the wells from plugging. Mineral deposits caused by chemical precipitation are removed from the well screens once every five years on a proactive schedule using mechanical cleaning. In Pancevo, the wells could become plugged because of one or more of the following reasons: (1) mineral deposits on the screens, as in Cincinnati, (2) biological growth on the well screens, or (3) design and construction methods.

The first step in addressing well maintenance in Pancevo was to determine if the wells were plugging due to biological growth. Biological growth can be determined analytically with various test kits that can be readily purchased, and CWW provided information on these kits to PWWC staff. If these tests show that there is no biological activity in the well that could cause this kind of plugging, then PWWC can conclude that the wells lose capacity either from mineral deposits on the screens or from the methods used to install the well. If tests show that the clogging is not due to biological growth, the second step is to check for mineral deposits. This can be accomplished either through video inspection or by moving ahead with mechanical cleaning of the well to see if that improves the well capacity.

It is also important to review the design and construction methods of the wells to determine if changes in these methods would result in better and longer-lasting performance of the wells. Proper well design must take into consideration the type of soils around the well screen, such that well screens are sized to provide the desired quantity of water while (1) keeping soils from entering the well and (2) minimizing approach and entrance velocities through the screen.

CWW provided information on proper well design to the PWWC staff and discussed it during visits to Cincinnati. For proper design, soil sampling at frequent intervals throughout the screened area must precede the installation of a well. These soil samples must be sieved (sorted by grain size and screen slot sizes). An artificial filter pack (sorted sand put into the well around the screen) may be needed if soil grain sizes are not coarse enough. The size of the filter pack must be designed based on the soil grain size, and the screen slot size must be based on the filter pack size. The lower the approach and entrance velocities, the longer a well will last.

#### Leak Detection

As previously stated, leak detection within the water distribution system is of primary concern, as the network water losses are approximately 35 percent in Pancevo. The partnership's goal was to help Pancevo evaluate leak detection equipment, determine what equipment would be best for Pancevo, and provide information to help Pancevo set up a leak detection program.

During a visit to Pancevo in July 2001, the Cincinnati team brought an acoustic leak-sounding detector to demonstrate the use of the technology. Pancevo had just begun evaluating literature on European-manufactured leak detection equipment, which is similar to that used in Cincinnati and is widely available at a relatively low cost. CWW demonstrated the leak-sounding detector to staff of both PWWC and HCP to give them a true "hands on" experience in the use of this technology. CWW staff explained how to determine a geographical area so that a leak survey could be performed. Further discussions took place regarding the limitations of this equipment

and how to use it in tandem with digital acoustic correlators. During the partners' visit to Timisoara, Pancevo officials also had the opportunity to learn about the leak detection program that Timisoara's water company has implemented.

In April 2002, Pancevo staff saw a more detailed demonstration of CWW's leak detection program during an exchange visit to Cincinnati. CWW demonstrated both types of its leak surveys—using the leak detector, and pinpointing by using the correlator. Pancevo staff learned how CWW uses dedicated, trained leak detection teams and met with leak detection crew members. Pancevo staff also saw how Cincinnati relies solely on the information provided by the leak detection crew in determining where to make leak repairs. Seeing the crew's performance yield positive results was very important for the PWWC team to gain confidence in the value of introducing such a program in Pancevo.

The partners held further discussions on how to develop and sustain an effective leak detection program. For the program to yield positive results, there must be a crew dedicated to the program. Proper training is crucial to effectively use the equipment. Having personnel willing to use the new equipment and allowing them to make mistakes as they learn is also important. Additionally, field personnel must have flexible working hours, as they may need to perform some leak surveys at night in high traffic volume areas. CWW also shared this information with HCP, which shares similar concerns about leakage in its distribution network.

#### Heating System Improvements

HCP presented numerous concerns at the beginning of the project. First, there was an immediate need for spare parts for the burners in the heating plant to generate sufficient heat for the upcoming winter. Also, new hot water circulation pumps were needed to reliably distribute hot water to customers. The heating company needed new combustion regulators to control the functioning of the burners and minimize energy losses. Finally, a new flue gas analyzer and combustion regulator was needed to control the plant's emissions and help prevent environmental pollution. HCP successfully procured many of these items using part of the city's \$100,000 grant from USAID.

Other key issues facing HCP include:

- The inability to evenly distribute heat to all customers.
- The inability to measure the amount of heat delivered to customers. This leads to ineffective revenue collection for the quantity of heat delivered and negatively impacts the ability of the company to attract new customers.
- The inefficiency of having numerous small heat generating plants that use four different types
  of fuel (natural gas, heavy heating oil, light heating oil, and coal). This system is not only
  inefficient but also makes equipment maintenance expensive. Automation and remote
  regulation of these substations is also desirable.
- The need for leak detection and pipeline replacement programs to reduce losses in the hot water distribution network.

Many of the techniques and solutions for PWWC that the partners discussed, such as the importance of introducing a leak detection program, are also applicable to HCP. In addition, HCP's managing director was able to visit a similar heating production facility at the University of Cincinnati during an exchange visit. The university provided a tour and organized a working session between its technical staff and HCP's director to aid in the evaluation of the problems in Pancevo and technical approaches to address them. Better management and technical fixes can solve some of the system's problems. However, some of the issues with Pancevo's central heating system will require large capital investments to fully resolve.

#### **Key Results and Recommendations**

#### Laboratory and Pumping Equipment

The USAID grant program enabled PWWC to acquire equipment that has allowed for consistent production of high-quality water and more effective control during the water treatment process. The variable frequency drive unit for the pump, also procured with USAID grant funds, has allowed the water treatment plant to provide adequate water pressure in the water distribution system. This equipment has made the distribution system more reliable and helped reduce some water losses.

#### Well Maintenance

PWWC staff now have the necessary information and tools to begin a closer evaluation of the problems with the groundwater wells. To date, Pancevo has attempted a mechanical and combination mechanical/chemical cleaning method. Initial results were successful, and a more complete study is underway to evaluate long-term results. Increasing the useful life of the wells using the solutions presented by the partners can enable Pancevo to avoid spending limited financial resources on wells that will fail in five to seven years.

CWW is willing to continue to assist Pancevo staff with further implementation of its recommendations related to well maintenance and leak detection. For well maintenance, this would include continued technical support for interpreting data, developing conclusions from the data, and providing specific well design criteria for local geotechnical conditions. For the leak detection program to be implemented, Pancevo must first purchase the necessary equipment. CWW can assist with developing and reviewing requests for proposals, equipment specifications, and bids related to obtaining this equipment. Once Pancevo has obtained the necessary equipment, the Cincinnati team plans to work with Pancevo in the development of a site-specific leak detection program to systematically survey the water and heating distribution systems for leakage.

#### Leak Detection

Through its exposure to CWW's leak detection program and the demonstration of leak detection equipment, PWWC has concluded that it should establish a leak detection program and find funds to procure leak detection equipment. PWWC can achieve long-term benefits and tremendous payback by implementing a leak detection program and reducing the amount of leakage from the distribution system. Reducing the leakage from the distribution system will make a greater quantity of treated water available for consumption. This would support potential economic growth and the expansion of the distribution system to neighboring villages without expanding the existing treatment plant. However, for such a program to be successful, it is critical to establish a dedicated leak detection team and provide the team with comprehensive training to ensure that the detection equipment is used effectively and properly maintained. Proper training and maintenance will allow PWWC to maximize its investment in the leak detection program.

#### Heating System

The spare parts and equipment obtained with USAID grant funds have played a tremendous role in the enhancement of service quality and reliability. Pancevo purchased a circulation pump to replace a failed unit, and the new pump is operating reliably. The flue gas analyzer allows HCP to monitor and reduce soot emissions and save energy. Due to the success of these grant-funded acquisitions, HCP persuaded the Pancevo Municipal Assembly to allocate budget funds to equip 15–20 percent of the system's substations with a remote operation system. The implementation of this remote operation system is expected to net a 20 percent energy savings in these substations.

#### **Lessons Learned**

Throughout the partnership, the three cities discussed numerous issues relative to water resources. These issues included water treatment techniques, groundwater contamination,

federal regulations, storm and sanitary pipelines, remote monitoring, metering, delinquent accounts, and management philosophies. However, trying to establish what was a valuable, yet quickly solvable problem was very difficult, because many of these technical problems require substantial capital funds to solve. The partners knew that there were only limited funds, and having all parties understand the limitations was extremely important in forming a productive partnership.

Visible evidence that the actions of the partnership teams can yield positive results is vital. Without confidence that a proposed project or technical solution will work, the potential for success can be undermined. Even though all partners may agree that a proposed approach is going to produce effective results, having some proof that the recommended solution has worked effectively elsewhere can help sustain the partners as they carry the project through difficult stages. Pancevo's exposure to Cincinnati and Timisoara's successful leak detection programs was helpful in this regard.

Continued partnering between Pancevo and Timisoara could be beneficial for Pancevo, especially in addressing HCP's heating system concerns. Timisoara faced similar concerns with its heating system several years ago, and has been able to successfully modernize its system in the past few years. The techniques and solutions that were used in Timisoara can serve as a valuable model for Pancevo to follow. CWW also desires to continue to monitor progress, seek advice, and champion further projects in Pancevo, which has staff who are clearly very dedicated and capable of meeting the needs of the citizens they serve.







# SUBOTICA CASE STUDY: Restoring Lake Palić and Developing a Wastewater Treatment Plan

Serbia Resource Cities Program
BEST PRACTICES SYMPOSIUM
Belgrade, Yugoslavia, October 24–25, 2002



Serbia Resource Cities Program
Best Practices Symposium
Belgrade, Yugoslavia
European Movement October 24 – 25, 2002



Serbia <sup>-</sup>



# SUBOTICA CASE STUDY: Restoring Lake Palić and Developing a Wastewater Treatment Plan

#### **Introduction & Summary**

Under the Serbia Resource Cities Program, the city of Subotica, Serbia, partnered with the cities of Akron, Ohio, and Szeged, Hungary, to work on key management and service delivery issues facing Subotica. Over the past two years, technical experts from Akron and Szeged have worked with their colleagues in Subotica to create a plan for the reconstruction of the municipal wastewater treatment system. The plan specifically addresses:

- Restoring the water quality of Lake Palić, a popular tourist attraction and a vital economic development resource
- · Reducing the impacts of industrial discharges
- Improving wastewater collection and treatment practices.

Resolution of these issues is critical to improving the wastewater treatment system for the region and to expanding regional opportunities for recreation and tourism. Subotica has made progress toward resolving these issues by learning about the management systems and practices in Akron, which is highly efficient in reducing organic materials and nitrogen from its waste stream. Szeged's experience in successfully applying for EU financial support for infrastructure upgrades to its wastewater treatment system and in preparing technical documentation to meet EU requirements is particularly relevant for Subotica to learn about as it begins seeking financial resources for capital improvements.

#### **Problem Statement**

Lake Palić, which covers an area of 550 acres, is situated approximately seven kilometers from the county/province seat of Subotica, a city with 100,000 inhabitants (the village of Palić itself has a population of 9,000). The lake has a centuries-old tradition as a water-related recreation and tourism destination for the several hundred thousand inhabitants in ten area settlements, as well as for people throughout Serbia. The region's famous Secessionist buildings from the early 20th century are also an important architectural and cultural resource.

The Lake Palić region is an important watershed catchment area that belongs to the category of tray (shallow) lakes of the Pannon basin, and is very sensitive to troublesome anthropogenic influences. In the area surrounding the lake there are no active water streams; the Danube River and the Tisza River are 70 and 30 kilometers away, respectively. In the past, water draining into the lake was clean and low in volume, and the lake's self-purification capacity was able to maintain adequate water quality for all uses. With increased urban and industrial development and the resulting adverse influences on water quality, the ecosystem was compromised.

Until 1975, untreated wastewater from the surrounding settlements went directly into the lake. As a result of accumulated materials from the untreated wastewater, a layer of approximately 2 million m³ of organic sludge developed. The water became highly eutrophic (destroying the equilibrium of the ecosystem due to organic and inorganic loadings), and its flora and fauna disappeared. The complete disintegration of the water ecosystem was complete in 1972, increasing environmental pollution and adversely affecting tourism in the Lake Palić area.

Between 1972 and 1975, the municipal government of Subotica, with support from its citizens, performed rehabilitation work including:

- Diversion of water from the lake (10 million m<sup>3</sup>)
- Removal and disposal of accumulated organic sludge (2 million m³)
- Construction of a wastewater treatment plant (WWTP) with a capacity of 20,000 m<sup>3</sup>/day (based on 120,000 inhabitant equivalents)
- Reconstruction of equipment in and around the lake.

The lake started its "new" life in 1975, with its ecosystem restored. The lake region became a favorite tourist destination again for people from settlements near and far, and tourist attractions were renovated in and around the revived lake. However, further industrial and urban development in the areas surrounding the lake presented new challenges to the ecosystem. Despite the reduction of organic loadings, there were still nutrient loadings like nitrogen and phosphorus, which are precursors to high eutrophication. By the late 1990s, the lake was again showing signs of accelerated eutrophication.

As the initial steps in improving the efficiency of the wastewater treatment, the WWTP needed to increase its hydraulic capacity, improve pollutant removal (reduction of organics and nutrients), upgrade equipment and treatment processes, and increase operations security. The completion of these proposed measures is imperative to the protection of Lake Palić's water quality and the economic vitality of the area as a tourist destination. Other urgent steps needed to stop these negative influences, upgrade the lake's ecological state, and protect the economic vitality of Lake Palić include:

- Strict measures requiring preliminary treatment of industrial wastewater (industrial pretreatment)
- Increased WWTP capacity to at least 45,000 m<sup>3</sup>/day
- · Increased efficiency of organics removal
- New processes for denitrification and phosphorus removal
- A solution for waste sludge disposal.

#### **Project Description/Implementation**

Over the past two years, during a series of exchange visits to all three cities and ongoing e-mail communications, technical experts from Akron, Szeged, and Subotica studied the 27-year history of Subotica's existing WWTP and the deteriorated condition of buildings and equipment resulting from the economic conditions in Serbia over the past ten years. As a result of their joint work, the partners determined the necessary steps to resolve Subotica's wastewater treatment problems.

Engineers from Akron and Szeged reviewed and commented on the overall wastewater treatment system and industry discharges in Subotica, provided background information on their respective wastewater treatment systems, and drafted detailed written recommendations for Subotica to consider in developing a reconstruction plan. Akron facilitated discussions with technical staff and arranged a tour of its wastewater treatment plant, which has been in operation since 1936 and protects an important receiving stream, the Cuyahoga River. Experts from Szeged shared infor-

mation and presented the preliminary treatment processes of their WWTP during a site visit. These processes help to preserve the quality of the Tisza River, which is endangered by a dam.

The partners determined that it is a priority for all industries in Subotica to pretreat their discharge prior to its entry into the waste collection system. To improve the water quality of Lake Palić, it is particularly urgent to install pretreatment equipment at three major Subotica companies: the Zorka chemical factory, the 29 November meat processing factory, and the Garled leather factory.

Installation of pretreatment processes should be a legal requirement for all industrial facilities as they undergo privatization. Local officials and technical experts need to lobby the national government to convince it that new national environmental regulations for industrial pretreatment must conform with European Union (EU) requirements. This is particularly important as the national and local governments seek EU financial support for infrastructure improvements and look toward accession to the EU. The partners agreed that strict enforcement of local pretreatment requirements is also needed. Local governments are the most familiar with local industries, and are in the best position to ensure that pretreatment requirements are enforced.

It is extremely urgent to upgrade the physical condition of the facilities and equipment of Subotica's existing WWTP. Included in the needed upgrade is the reconstruction of the aeration system. The old surface aerators, critical to biological wastewater treatment, need to be replaced with a fine bubble aeration system to improve treatment and energy efficiencies. Rehabilitation of the existing buildings is also required in conjunction with the process improvements. This modest reconstruction will ensure better performance of the existing critical treatment processes by extending the life of existing facilities and equipment until Subotica can fund and construct a new WWTP with the specifications determined by the partners.

Based on their analysis of current and future needs, the engineers from the three partner cities determined that the new treatment plant should meet the following design criteria:

- Hydraulic loading of 60,000 m<sup>3</sup>/day
- Organic loading of 15,000 kilograms BOD<sub>5</sub> (biological oxygen demand)/day
- Inhabitant equivalents of 250,000.

These treatment capacities will enable wastewater to be treated to European Union requirements:

- COD (b) < 75 mg/L</li>
- BOD<sub>5</sub> < 20 mg/L</li>
- Suspended solids < 30 mg/L</li>
- Total nitrogen < 10 mg/L</li>
- Total phosphorus < 2 mg/L.</li>

The project is proposed to consist of several phases. The design calls for building the facilities and procuring equipment in four modules, each with 25 percent of full capacity (four modules x  $15,000 \, \text{m}^3/\text{day}$ ). The partners also analyzed the possibility of incorporating the existing WWTP into the new facility.

Subotica has initiated the first phase of the new WWTP project, which began with persuading the Subotica Municipal Assembly, within its existing resources, to make wastewater treatment improvements its highest priority. On November 28, 2001, the assembly adopted a report, "Regarding Unfavorable Tendencies in the Ecological Condition of Lakes Palić and Ludas and the Need to Undertake Certain Measures," which confirms wastewater treatment improvements as a municipal priority. As part of adopting the report, the assembly also approved a schedule of activities to restore water quality for Lakes Palić and Ludas. The Water Company will soon

complete a master plan for the wastewater treatment plant and system, with concurrent efforts to obtain licenses, permits, and all other required documentation.

The total estimated project cost is US\$30 million, with an estimated construction period of 48 months. Currently, only two sources are available to repay future loans, including a portion of the local infrastructure tax (3.5 percent of citizens' income) and increased water and wastewater rates. Until the end of 2001, water and wastewater user rates were under the control of the Serbian government, and were highly subsidized—wastewater rates, for example, were set at 10 Yugoslav Dinars (din)/m³, or US\$0.15/m³. However, in 2002, authority to establish local water and wastewater rates was granted to local governments, and on the recommendation of the Subotica Water Company, the municipal assembly has raised the wastewater rate to 14din/m³ (US\$0.23/m³). This rate covers only the direct operating and maintenance costs, and reflects the highest rate the assembly believes is affordable for families (3–5 percent of average monthly income).

Local tax and wastewater rates will cover only a small portion of the project cost, and raising rates much higher at this time is not politically feasible. A major percentage of the costs associated with the new WWTP will therefore require outside sources of funds (e.g., grants, donations, and loans). Subotica is engaged in ongoing efforts to obtain the necessary project funding commitments. Its first effort was the preparation of an application for a Donors Conference that was held in Bucharest in October 2001. Szeged helped Subotica prepare this funding proposal, based on Szeged's experience in obtaining funding for infrastructure investments from the EU and related sources. While Subotica has not received a positive response to date, preparing the funding proposal was a valuable experience that Subotica has been able to replicate in developing subsequent funding proposals.

Discussions continue with development banks and donors, as Subotica regularly sends representatives to donor conferences. Possible sources of funding include the European Bank for Reconstruction and Development, with which Subotica has had preliminary discussions; the European Union's Phare program; Sapard, Ispa, and Cards (if they are opened to Serbian cities); and the Budapest-based EXIM Bank, which has expressed interest in offering financial assistance. The city is also engaged in an ongoing effort to obtain funding from the Serbian government's Environmental Protection Fund.

#### **Key Results**

The cooperation between Akron, Szeged, and Subotica has provided Subotica access to many resources, including:

- Akron's organizational structure for wastewater treatment
- Information regarding the technical and institutional aspects of leadership for the sewage collection system and WWTP infrastructure in Szeged and Akron
- Information regarding maintenance of the WWTP in Akron and maintenance of the sewage collection system in Szeged
- Training on wastewater collection and treatment systems, including site visits and staff discussions, in Akron and Szeged
- Training on computerized monitoring and control of wastewater treatment processes in Akron
- Training on critical aspects of regional solutions for collecting, transporting, and treating wastewater in Akron and Szeged
- Relationship of wastewater collection and treatment costs to water usage rates in Akron and Szeged
- Public relations activities for wastewater collection and treatment in Akron

- Flow prediction methodology using computer technology developed by Akron area engineering firms
- Akron's emphasis on staff interaction with design professionals in establishing project requirements
- Information from ICMA regarding funding sources for wastewater collection and treatment projects
- Information regarding the success of Szeged in obtaining funding for construction for wastewater collection and treatment systems from the European Union
- The capital investment methodology used to help make decisions about infrastructure investments in Akron
- Information from Akron and Szeged on how to establish personal contacts with public and private sector organizations that enable timely access to important information
- The establishment of professional relationships with engineers from Akron's sister city, Chemnitz, Germany.

#### **Lessons Learned**

The decade of isolation in Subotica and all of Serbia stopped the flow of expert information about the ever-changing field of environmental protection and wastewater treatment. Thanks to the cooperation with Szeged and Akron, Subotica has newly established technical and political relationships, contacts, and courses of action that have restarted the information flow. Subotica's water and wastewater experts now have a wide range of information for their use, as well as access to information as needed in the future. The knowledge that Subotica professionals were able to access through the partnership serves as a good foundation for other cities in Serbia, many of which face similar environmental problems.

While cities can develop technical solutions in a relatively short time frame, funding solutions lag far behind. It is essential for local professionals to educate municipal, provincial, and republic-level officials about the critical need to improve wastewater collection and treatment systems to meet EU standards. This is important both for environmental reasons and to facilitate access to outside funding for infrastructure investments.

Funding of the proposed improvements will require a combination of increased wastewater rates, assistance from the municipal/province/republic level, and outside funding sources. The municipal government, assembly, citizens, and technical experts must be partners to advance support for the improvements. Also, the pending privatization of local industries must require pretreatment processes to minimize the industries' impact on the wastewater treatment system and water quality.

Subotica was one of the first municipalities in Yugoslavia to deal with the problem of wastewater treatment, in part because of the importance of Lake Palić to the area. The history of this facility and the experience that its staff has accumulated over the past 27 years is a significant resource for the city to draw on. Input from the plant's engineers will greatly aid Subotica as it seeks to address current and future wastewater treatment needs and design and implement new treatment systems. The use of new technologies that require denitrification and phosphorus removal will again make Subotica a leader in wastewater treatment and environmental protection in Yugoslavia.

Implementing the projects described above will improve Lake Palić and the environment and support economic development, thus improving the quality of life for all citizens of Subotica.







# NIS CASE STUDY: Department for Information and Civic Initiatives

Serbia Resource Cities Program
BEST PRACTICES SYMPOSIUM
Belgrade, Yugoslavia, October 24–25, 2002



Best Practices Symposium
Belgrade, Yugoslavia *European Movement*October 24 – 25, 2002

ICMA RESOURCE CITIES



# NIS CASE STUDY: Department for Information and Civic Initiatives

Serbia Resource Cities Program

#### **Introduction & Summary**

When Nis entered into a three-way partnership with Sofia, Bulgaria, and Columbus, Ohio, in July 2000, the city of Nis was a part of an opposition front against the regime of Slobodan Milosevic. In anticipation of local and national elections that it was hoped would redefine the political and socioeconomic landscape of Serbia, the partners discussed the different styles of governance between transitional settings and the United States, where local democracy has had more than two centuries to mature. The city of Nis felt that as a seat of major pro-democracy leaders in Serbia, it could benefit from its Columbus partners by gaining know-how in methods of public participation. The Serbian team set out to explore the feasibility of a Department for Information and Civic Initiative.

Columbus was well qualified to share its knowledge of public participation methods. The city has a Mayor's Action Center (MAC) within the mayor's office where citizens can voice concerns and opinions and ask questions between 8 am and 5 pm every day or anytime via the Internet. MAC is also a clearinghouse for complaints about municipal services and suggestions for how to improve them. To field inquiries and ensure accurate responses, MAC consults various city departments. In addition to MAC, the city of Columbus has a Public Information Office, which takes care of public relations and information for the city. Both municipal offices function as channels for citizen participation, securing a balance between what citizens need and what the local authorities deliver. These offices also provide a direct link between the local taxpayer and the agents of governance, ensuring accountability and transparency of the services performed.

#### **Problem Statement**

Nis has always boasted a progressive and forward-looking leadership that stood for democracy even when Milosevic's central authorities reduced budget allocations and neglected the needs of the city in other direct and indirect ways. The city leadership has traditionally been charismatic and close to the people, but, like other local governments in cash-strapped economies, Nis found it challenging to provide services that are sufficient and efficient due to a lack of capital funds and proper management training. Another legacy of the communist era has been to leave citizens completely uninterested in local affairs, and governments lacking channels for communicating with taxpayers.

Nis and Columbus discussed this problem and how the link between the alienated governing and governed can be restored through appropriate civic institutions. The local level seemed the ideal place to start restoring this link in a country shaken by a compromised central regime. Moreover, the time seemed ripe for grassroots initiatives that could be replicated in other cities and hopefully translated into a larger-scale civic participation in governance. The city of Nis had drafted a concept for a new civic institution, a public information center, in 1997 but abandoned the project. The Resource Cities partnership gave the city the opportunity to reconsider and revise the idea.

#### **Project Description/Implementation**

The Resource Cities partners viewed the project to create a Department for Information and Civic Initiatives as a way to introduce transparency in local management methods, provide Nis with feedback from its citizens, and give the city an opportunity to improve services and adopt a customer-friendly attitude. The partners divided the project into several phases:

- Feasibility analysis: comparing practices in Columbus and Sofia; assessing what is adaptable from Columbus and Sofia and feasible in Nis.
- Strategy definition: selecting a model applicable to Nis and transferable to other Serbian cities.
- Organizational analysis: defining program functions and the location of the new department within the city structure.
- Staffing analysis: drafting job descriptions and determining the number of personnel.
- Hiring of staff.
- Purchase of equipment.

#### Organizational Analysis

As a result of the organizational analysis, the partners determined that the Department for Information and Civic Initiatives should be housed in the Assembly Affairs Secretariat of Nis. The mission of the department is to establish new and more direct channels of communication between the local authorities and citizens, nongovernmental organizations (NGOs), and civic groups. In Columbus both the mayor's office and city council have procedures for informing the citizens, and Nis borrowed from both when carrying out this project.

The new department's functions are to maintain relations with the media, citizens, and NGOs and to design and maintain a Web site for Nis. Detailed activities are listed below.

#### Media Relations:

- Making daily contact with journalists and providing regular updates on initiatives, activities, and types of services performed by the city
- Preparing press releases for the mayor's office, the vice-president, the city assembly, and the
  executive board of Nis
- Drafting public announcements
- Arranging press conferences with city assembly officials
- Preparing public statements on behalf of the city assembly
- Publishing the city's monthly newsletter.

#### Citizen Relations:

- Holding public hearings and open houses for citizens and city assembly officials
- Providing customer service for public petitions and liaison with city offices
- Formulating policy based on citizens' common questions and concerns.

#### NGO Relations:

- Routing calls from NGOs and arranging meetings with city departments
- Soliciting NGO project proposals and issuing public procurements
- Fostering partnerships between the city and civic groups through open houses and receptions.

#### Internet:

- Designing the city Web site
- Updating postings about city functions and activities daily.

#### Staffing Analysis

Based on the department's structure and functions, Nis established the following staffing pattern based on examples from Columbus:

#### 1. Position Name: Department Head – 1 position

Job Description: Manage and oversee the overall department operations, assign staff tasks, prepare annual report, oversee staff performance and promotion, liaise with other city departments.

#### Requirements:

University degree, over five years of media/public relations/local government experience Completed civil service vocational exam.

#### 2. Position Name: Public Relations Manager – 2 positions

Job Description: Liaise with journalists; provide public information about the administration's activities; oversee news and press releases, public announcements, and press conferences.

#### Requirements:

Journalism training preferred, more than two years of work experience Completed civil service vocational exam.

#### 3. Position Name: Public Relations Officer – 2 positions

Job Description: Draft public statements for city officials, public announcements about municipal services, coordinate newsletter publication.

#### Requirements:

University degree (journalism or humanities preferred) Completed civil service vocational exam.

#### 4. Position Name: Citizens and NGO Liaison - 2 positions

Job Description: Respond to public inquiries and route them efficiently throughout city departments, respond to inquiries about city programs, set up appointments between customers and officials, ensure proper customer-city relations, expedite public demands, troubleshoot information deficiencies, respond to requests from NGOs.

#### Requirements:

University degree, one year of work experience Completed civil service vocational exam.

#### 5. Position Name: Information/Internet Operator – 2 positions

Job Description: Design the city of Nis's Web site, perform daily updates, liaise with program staff on information postings.

#### Requirements:

Training in information technology (IT) Completed civil service vocational exam.

#### **Key Results**

From this project Nis officials gained an understanding of the importance of providing information to citizens and civic groups and soliciting regular feedback. Full results of the project have yet to be measured, as the Department for Information and Civic Initiatives became operational only shortly before the end of the partnership. However, there are already a few tangible results:

- A new, functioning institution with an organizational mission to inform citizens and welcome public feedback on services provided and suggestions for improvement
- Commitment to a customer-friendly attitude toward public requests and petitions
- Introduction of unprecedented transparency in the workings of the municipal administration
- An organizational model replicable in other municipalities across Serbia.

With its new Department for Information and Civic Initiatives, the city of Nis has attracted the attention of the Serbian Local Government Reform Program (SLGRP). Through the SLGRP, the model of the department will be replicated in other cities across Serbia. Also, the SLGRP has donated computer equipment to Nis to enhance the work of the new department.

It is anticipated that Nis's new department will reduce the alienation between citizens and the local government and will foster citizen participation in the following ways:

- Local government officials, aware of the increased level of publicity, will adopt a friendlier and more customer-focused attitude.
- The amount of bureaucracy will be reduced as a result of public officials functioning more competently under increased scrutiny, and of staff in the new department dispatching citizen complaints and inquiries in an appropriate manner.
- Citizens will be better informed about the role of local government and the way their taxes are spent.
- There will be two-way communication between the local government and citizens.
- The new department will create a database of citizen initiatives, questions, and concerns, as well as NGO programs.
- Nis will increase the number of public-private partnerships the city has with NGOs and businesses.
- Nis will improve the city's marketing through the Internet.

#### **Lessons Learned**

The city of Nis has learned the following lessons from this project:

- It should be a core mission of local governments to stay open to the requests and concerns of the citizens.
- Keeping citizens informed lends local authorities legitimacy and increases their authority.
- Public participation in programs and initiatives eases the decision-making process and strengthens the community.
- Soliciting public input in activities and decision making establishes shared responsibility and helps governments self-correct.
- Staying close to civic groups, NGOs, and businesses generates opportunities for publicprivate partnerships and harnesses community resources.